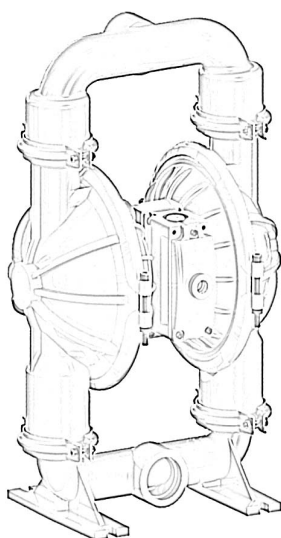
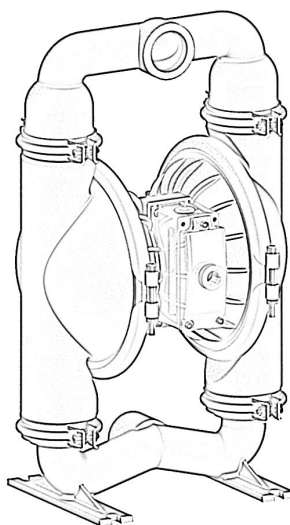




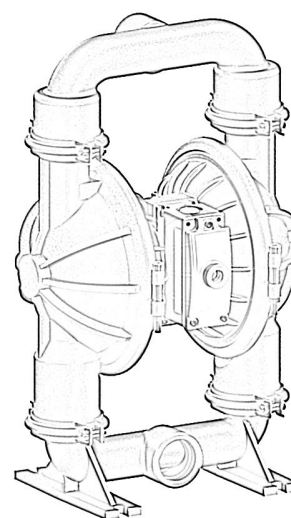
## Operation and Maintenance Guide



SDP 50 AL N/B/S/H/V/T



SDP 50 SS N/B/S/H/V/T



SDP 50 CI N/B/S/H/V/T

SDP 50 Aluminum / Stainless Steel / Cast Iron Construction,  
All variants

Models	Descriptions
SDP 50 AL N/B/S/H/V/T	Aluminum with Neoprene, Buna N, Santoprene, Hytrel or Viton and PTFE fitments
SDP 50 SS N/B/S/H/V/T	Stainless Steel with Neoprene, Buna N, Santoprene, Hytrel or Viton and PTFE fitments
SDP 50 CI N/B/S/H/V	Cast Iron with Neoprene, Buna N, Santoprene, Hytrel or Viton fitments

Read this manual carefully before installing, operating or servicing this equipment. It's the responsibility of the employer to ensure this manual is read by the operator. Please preserve this manual.

This document is issued with Product Serial No

**Table of Contents**

3	Pump Nomenclature
3	Operating and Safety Instructions
4	Operating Instructions
5	Suggested Lubricants
6	Suggested site selection and installation recommendations
7	Troubleshooting
8	Maintenance
8	Disassembly and Re assembly
11	Re-Assembly
12	Bill of Materials for SDP 50 ALN Pumps
13	Exploded View for SDP 50 AL Pump
14	Bill of Materials for SDP 50 ALB Pumps
15	Bill of Materials for SDP 50 ALS Pumps
16	Bill of Materials for SDP 50 ALH Pumps
17	Bill of Materials for SDP 50 ALV Pumps
18	Bill of Materials for SDP 50 ALT Pumps
19	Bill of Materials for SDP 50 SSN Pumps
20	Bill of Materials for SDP 50 SSB Pumps
21	Bill of Materials for SDP 50 SSS Pumps
22	Bill of Materials for SDP 50 SSH Pumps
23	Bill of Materials for SDP 50 SSV Pumps
24	Bill of Materials for SDP 50 SST Pumps
25	Bill of Materials for SDP 50 CIN Pumps
26	Bill of Materials for SDP 50 CIB Pumps
27	Bill of Materials for SDP 50 CIS Pumps
28	Bill of Materials for SDP 50 CIH Pumps
29	Bill of Materials for SDP 50 CIV Pumps
30	Bill of Materials for SDP 50 CIT Pumps
31	Dimensional Data
31	Repair Kits for SDP 50 ALX Pumps
31	Air Valve Replacement Kits for SDP 50 ALX / SSX Pumps
32	Air Valve Replacement Kits for SDP 50 CIX Pumps
33	Repair and Replacement Kits
34	Eu Declaration Of Conformity
35	Summery For The Atex Rating For Teryair Aodd Models
37	Warranty Certificate

## Pump Nomenclature

XX	XX	XX	X	X	X
<i>Air Valve Type</i>	<i>Pump Size</i>	<i>Material of Construction</i>	<i>Material of Diaphragm</i>	<i>Bolted or Clamped</i>	<i>Threading on Inlet and Outlet</i>
DP - Classic ADP - Advanced SDP - MaxFlo	06 - 1/4"	AL - Aluminium SS - Stainless Steel 316L PP - Polypropylene CI - Ductile Iron	B - Nitrile N - Neoprene S - Santoprene T - PTFE V - Viton H - Hytrel	B - Bolted C - Clamped	R- NPT G - BSPT P - BSPP F - Flanged
	12 - 1/2"				
	15 - 1/2"				
	25 - 1"				
	40 - 1 - 1/2"				
	50 - 2 "				
	75- 3"				
	100 - 4"				

## Operating and Safety

### Instructions



#### Warning: Static Electricity

Static sparks can cause explosion resulting in severe injury or death.

Ground the pump and the pump connections like hoses and containers into which or from the fluid is being transferred. Connect the grounding wire to any bolt on the pump.

Check continuity of electrical path to ground at regular intervals.

Consult local building and electrical codes for grounding requirements where needed.

Use hoses containing a grounding wire.



#### Warning: Pump Exhaust

In case of a diaphragm failure, fluid being pumped may spray out from the exhaust of the pump. This may cause severe injury depending on the fluid being pumped.

If the fluid is hazardous, pipe away the exhaust to a safe remote location using a generous diameter pipe preferably with a grounding arrangement, and refit the muffler at the end of this arrangement.

Always wear safety glasses while in the vicinity of an operating pump.



#### Warning: Overpressure / Hazardous Pressure

Do not exceed the max supply air pressure of 125 PSI.

Make sure all connected hoses and pipelines are rated to operate safely with the pressures generated by pump of 125 PSI.

Do not open or handle pump or hoses while pressurized.

Disconnect air supply line and relieve pressure from the system by carefully opening discharge and supply lines.



#### Warning: Hazardous Materials

Do not move a pump that contains hazardous fluids trapped inside it. Please observe prescribed handling and safety codes. Drain the pump safely, by turning it upside down and collecting the fluid safely, before moving the pump.



#### Warning :Explosion

Please check compatibility of fluids intended to be handled with the materials of construction of the pump. Severe reactions and explosions may occur if materials are incompatible. Caution: Chemical compatibility

Please check that the fluid being pumped is compatible with the wetted parts of the pump. Refer Cole Parmer compatibility (<http://www.coleparmer.in/Chemical-Resistance>) guide for details. Note that chemical compatibility may change with temperature; take this into account while selecting pump material.

**Caution: Structural support**

Please refer figure 1 and ensure that the piping system is independently supported and does not load the pump. The pumps are not designed to take the continuous and often pulsating load of a piping system. Important to use a flexible connection between rigid piping and pump casings.

**Caution: Running dry, disconnection of hoses when not in use**

Although these pumps can be run dry for long periods, it is advisable to avoid this as it causes unnecessary wear of wearing parts.

**Caution: Operator understanding**

Please ensure that all operators have read this manual and have the required understanding of safe working practices and are equipped with safety equipment when working on/ around the pump.

**Caution: Using genuine teryair fittings & spares**

Use genuine teryair parts to ensure correct pump operation and maximize life.

**Warning Conditions for Certification**

1. Control of Environmental humidity to minimize the generation of the static electricity.
2. Protection from direct airflow causing a charge transfer.
3. Touch with an insulating object to avoid electrostatic charge hazard.
4. Clean the surface with damp cloth only to avoid electrostatic charge hazard.

## Operating Instructions

The Teryair Stroke diaphragm pump generates a alternate stroking of the diaphragms against the fluid in the liquid chambers of the Pump. This reciprocatory action is responsible for the fluid being pumped.







It is possible to control the output of the pump by controlling the supply air pressure.

It is also possible to control the output of the pump by throttling action on the fluid flowing in the outlet piping by means of a valve. if such a valve is shut completely the pressure in the discharge piping increases to a point when the pressure at pump discharge equals it and the pump comes to a stop. This causes no damage to the pump and the pump consumes no more energy.

Upon opening of the valve, the pump starts reciprocating once again and resumes fluid delivery.



### Caution: Temperature limitations and diaphragm options

<b>Neoprene</b>		An excellent general-purpose diaphragm for use in non-aggressive applications such as water-based slurries, well water or sea water. Exhibits excellent flex life and low cost. Temperature range -18°C to +93°C (0°F to +200°F)
<b>Nitile</b>		Excellent for applications involving petroleum / oil-based fluids such as leaded gasolines, fuel oils, non-synthetic hydraulic oils, kerosene, turpentine and motor oils. Temperature range -12°C to +82°C (+10°F to +180°F)
<b>Santoprene</b>		Good abrasion resistance. Low cost. Can handle mild acids and alkalis well. Excellent low cost alternative to ptfe. Excellent suction capabilities Excellent general purpose diaphragm. Temperature range -40°C to +107°C (-40°F to +225°F)
<b>Hytrel</b>		Good abrasion resistance. Low cost. . Excellent suction capabilities Good general purpose diaphragm. Temperature range -29°C to +104°C (-20°F to +220°F)
<b>Viton</b>		Excellent for use in applications requiring extremely hot temperatures. May also be used with aggressive fluids such as aromatic or chlorinated hydrocarbons and highly aggressive acids. Especially where high suction lift is important. Temperature range -40°C to +177°C (-40°F to +350°F)
<b>PTFE</b>		Excellent choice when pumping highly aggressive fluids such as aromatic or chlorinated hydrocarbons, acids, caustics, ketones and acetates. Temperature range +4°C to +104°C (+40°F to +220°F)

### Suggested Lubricants

Brand	Above 27 Deg C (	From 5 Deg C to 27 Deg C	Below 5 Deg C
Shell	Toona R 72	Toona R 41	Toona R 27
Mobil	Almo 529	Almo 527	Almo 525
Esso	--- --	Arox EP 65	Arox EP 45
Caltex	Rando Oil 150	Rando Oil 100	Rando Oil 46
Texaco	Regal Oil F	Regal Oil PE	Regal Oil B
Daltron	Silkolene 881	Silkolene 548	Silkolene 773
Burmah Castrol	RD Oil 3	RD Oil Light	Megna SPX
BP	RD 220 HP60C	RD150 HP20C	RD80 HP10C
Duckham	Garnet 7	Garnet 6	Zero Flo 5
Sternol	Merlin 87	Merlin 71	Merlin 54
Petrofina	Purifoc 53	Purifoc 46	Purifoc 32
Chevron	Vistac Oil 18X	Vistac Oil 19X	Vistac Oil 9X

## Suggested site selection and installation recommendations

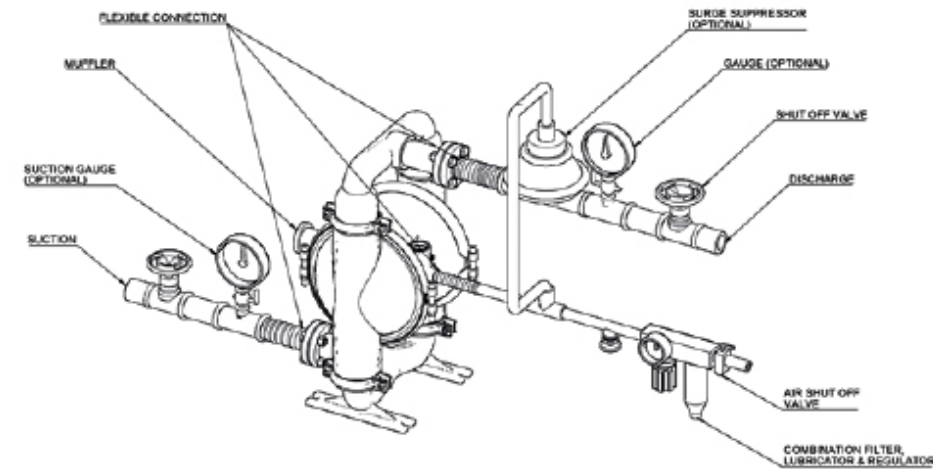


Figure 1

### Location selection

Pump location must be easily accessible with reasonable space around for maintenance operations.  
Pump dimensional data for each variant is available in section showing exploded views

### Air supply

Compressed air at 90 PSI (Stroke pumps can take a max of 125PSI), free from moisture and having an oil mist is essential. Use of a filter (50 microns), a lubricator and a regulator is highly recommended and should be installed as close as possible to the pump inlet.

Ensure correct grade of oil is used in the lubricator bowl. Too thick oil may slow down the valve shifting mechanism and affect pump performance. See suggested lubricants on page no 5.

### Piping

See section on safety if used in hazardous area)

See Figure 1.

Suction side 2 inch or larger, non-collapsible

Delivery side 2 inch or larger.

A minimum number of bends and fittings to be used.

A flexible connection between suction, delivery and air supply piping is highly recommended such that piping stresses and loads do not transfer to pump housing.

Select piping materials such that chemical compatibility is maintained with the fluid being pumped.

### Suction

Ensure that the suction head after installation is well within the pumps suction capabilities

### Muffler

Use of supplied muffler is recommended to bring pump operation sounds down to comfortable levels, in case of hazardous fluids handling, please read section of safety regarding piping away of exhaust see

Warning: Pump Exhaust) earlier in this manual.

## Troubleshooting

Serial No	Description	Causes	Remedial Action
1	Pump stops and will not start	Insufficient Air Pressure	Check air pressure is as recommended at the pump air inlet
		Air Filter Blocked	Check if debris has clogged the inlet filter on the FRL unit/pump inlet air valve ( some models have air filter on the air inlet valve ) and ensure clear passage of air
		Internal damage or excessive wear on components	Proceed to dismantle the pump, examine component for wear, replace any worn components, re assemble carefully as instructed in this manual and re start the pump.
2	Pumps runs slowly, poor delivery	Cavitation	Check if cavitation is occurring in the suction side, if so reduce suction vacuum by slowing down the pump.
		Worn Balls and Seats	Check proper sealing action of balls against seals, these components need to be replaced as a set if they are worn.
		Insufficient or wrong lubricant in the air supply.	Ensure that the lubricant is as per the recommended chart, a thicker lubricant often makes the air valve work sluggishly
		Internal damage or excessive wear on components	Proceed to dismantle the pump, examine component for wear, replace any worn components, re assemble carefully as instructed in this manual and re start the pump.
3	Pump air valve freezes	Excessive moisture in supply air line.	Ensure that the dew point of the supplied air is low enough. Install a air dryer or moisture separator on the supply line
4	Air bubbles in pump discharge or product sprays out of exhaust vent	Broken Diaphragm	Proceed to dismantle the pump, examine component for wear, replace any worn components, re assembly carefully as instructed in this manual and re start the pump
		Improper seal between inner pistons, outer pistons and shaft.	
		Air leakage into product from balls / seats area	
		Air sucked into suction pipeline due to insufficiently tight joints on suction pipeline.	



## Maintenance

Regular inspection and maintenance schedules will greatly enhance the life of the pump and will ensure a trouble free and safe working environment with little chance of breakdowns. Follow the instructions clearly in “Disassembly and Reassembly” of the pump and in the troubleshooting section.

Use genuine Teryair spares and if possible mention the serial number of the pump when ordering spares.

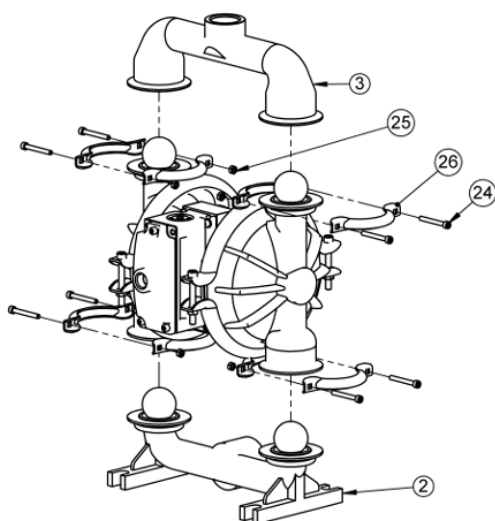
Always replace elastomers as a set, eg diaphragms, balls and seats.

## Disassembly and Re assembly

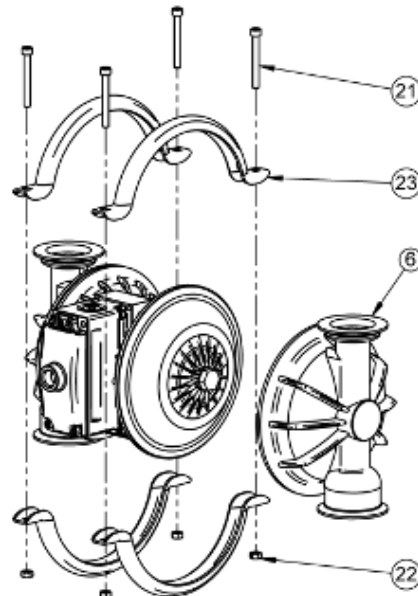
- Shut off air supply and allow residual Pressure to bleed off.
- Disconnect air supply
- Disconnect suction and discharge piping
- Turn pump upside down allow process fluid to drain away. If fluid is hazardous due care should be taken.
- Make a mark to indicate the positioning of each liquid chamber relative to the housing.

**NOTE:** Replace worn parts with genuine TERYAIR parts for reliable performance.

### 1. Replacement Of Diaphragm

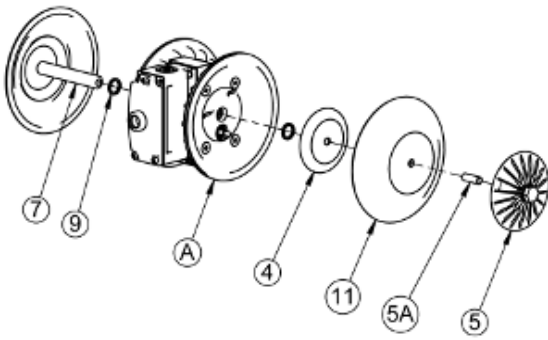


- Unscrew both bolt (24) & nut (25) as shown in the exploded view and proceed to remove the small clamp (26). Repeat for the other three small clamps. Remove the outlet (3) & inlet (2) respectively. Examine the balls, seals (and seats) for wear.



- Now unscrew hex socket head bolt (21) & nut (22) of any one side and proceed to remove the big clamp (23). Now remove the outer chamber(6). Now repeat the same procedure to remove the second outer chamber (6).





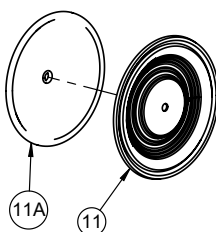
- c. Now with the help of two spanner hold one of the across flat of one outer flange (5) and rotate the second outer flange (5) to disassemble it from the shaft (7). Remove the diaphragm (11), stud (5A) & inner flange (4). Now pull out the shaft (7) out of the shaft housing assembly (A).

\*For ALT/SST series hold one of the across flat of hex. Bolt (5A) and rotate the second bolt (5A) to disassemble it from the shaft. Remove backup diaphragm (11), PTFE diaphragm (11A) & inner flange (4). Now pull out the shaft out of the shaft housing assembly (A).

- d. For other side Diaphragm removal - now hold the shaft (7) in a vice with proper packing. Care must be taken not to damage the shaft outer surface. Now remove the outer flange (5) with spanner.

\*For ALT/SST series remove the bolt (5A) and remove the outer flange (5), Backup diaphragm (11), & PTFE diaphragm (11A).

For  
PTFE Models



- e. Now replace the diaphragms (11). Ensure that diaphragm orientation is correct, i.e. For ALB/ALN/ALV the sticker side of the diaphragm (11) to be located in the outer chamber (6). Now assemble the outer flange (5) in reverse manner and remove the half shaft assembly from vice.

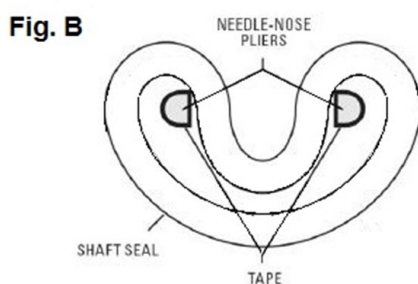
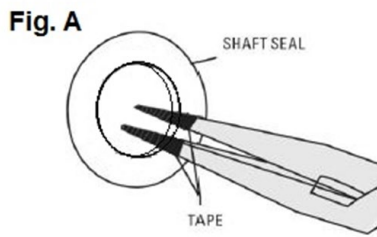
\* Refer fig. A for ALT & SST model the convex side of outer ring PTFE diaphragm (11) to be located in outer chamber (6). For the backup diaphragm (11A) the larger side of outer ring to be located in shaft housing (A) & small in the concave groove of PTFE diaphragm (11).

\* For ALS/ ALH model AIR SIDE marking to be located toward the shaft housing (A).

- f. Lubricate the edge of the shaft with specified lubricant. Slowly insert the shaft with rotating motion. Care should be taken not to damage the rubber rings (9). (Refer Image of step "c")
- g. Once the half shaft open portion comes out of the bush, follow the procedure in reverse manner as described in step (c), (b) & (a) and assemble the pump. (Refer Image of steps "c, b & a")

## 2. Replacement Of Shaft O-Rings

- a. For removing the rubber rings from bush, first follow the step a, b c & d from the diaphragm replacement.
- b. Now remove the seals with the help of needle Nose pliers. Care should be taken not to damage the inner face of bush.
- c. Once all the old seals are have been removed, the inside of the bushing should be cleaned to ensure no debris is left that may damage to new seals (Pressurized air is preferable).
- d. These following tools can be used to aid in the installation of new seals:
- Needle Nose pliers
  - Phillips Screwdriver
  - Electrical Tape



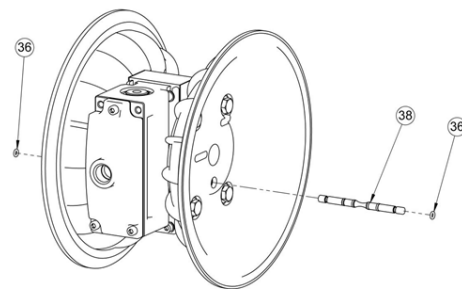
- e. Wrap electrical tape around each leg of the needle nose pliers (heat shrink may also be used) . This is done to prevent damaging the inside portion of the new seals.
- f. With a new seal in hand, place the two legs of the nose pliers inside the seal ring. Open the pliers as wide as the seal diameter will allow, then two fingers pull down on the top portion of the seal to form kidney bean shape. (Refer Fig. A)
- g. Lightly clamp the pliers together to hold the seal into the kidney shape. Be sure to pull the seal into as tight of a kidney shape as possible, this will allow the seal to travel down the bushing bore easier. (Refer Fig. B)
- h. With the seal clamped in the pliers, insert the seal into the bushing bore and position the bottom of the seal into the correct groove. Once the bottom of the seal is seated in the groove, release the clamp pressure on the pliers. This will allow the seal to partially snap back to its original shape.

- i. After the pliers are removed, you will notice a slight bump in the seal shape. Before the seal can be properly re-sized, the bump in the seal should be removed as much as possible. This can be done with either the Phillips screw driver or your finger, apply light pressure to the peak of the bump. This pressure will cause the bump to be almost completely eliminated.
- j. Lubricate the edge of the shaft with specified lubricant.
- k. Slowly insert the shaft with rotating motion. This will complete the re-sizing of the seal
- l. Perform these steps for the remaining seals.

### 3. Replacement Of Ball Seat & Ball

- a. Follow the step (a) of diaphragm replacement. Replace the ball (12) & seal (13) with new one.  
\* For ALT, SST series change the valve seal (13) & o-ring (13A) with new one.

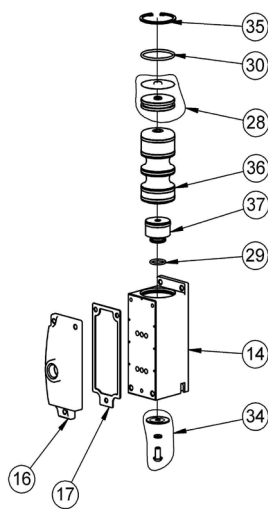
### 4.Replacement Of Secondary Shaft Assembly



- a. For removing the secondary shaft assembly from center piece assembly, first follow the steps a, b, c, d from the diaphragm replacement and remove the outer chamber (6).
- b. Repeat the same procedure to remove the other side also.
- c. Remove the O-rings from both sides of secondary shaft assembly (38).

- d. Now if you see there is a center drill mark on one side of the secondary shaft assembly (38). Pull the secondary shaft assembly (38) from that side only.
- e. During assembly make sure to push the secondary shaft assembly (38) from the plain side only into the sleeve (8).

## 5. Replacement of Air Valve And O-Ring of End Cap



- a. Remove the circlip (35) with the help of a circlip opener. Remove the end cap metal cover and now use a M6 Bolt to pull the end cap (28) with its O-ring (30) out of the air valve body (14).

**(Note - Ensure that the metal cover is always installed with an end cap 28)**

- b. Use the same M6 bolt to pull the air piston assembly (36) with all its seals. This piston assembly (36) need to replace as a single piece.
- c. In order to remove the end plug assembly (37) with its seals, remove the screw with washers (34) and push it. End plug assembly (37) also needs to be replaced with seals.
- d. Its recommend to change both the O-rings

(30) and (29) during replacement of internal parts.

## Re-Assembly

Upon performing applicable maintenance to the air distribution system, the pump can now be reassembled. Please refer to the dis-assembly instructions for photos and parts placement. To reassemble the pump, follow the dis-assembly instructions in reverse order. The air distribution system needs to be assembled first, then the Diaphragms and finally the wetted path. Please find the applicable torque specifications on this page. The following tips will assist in the assembly process.

- a. Clean the inside of the center section shaft bore to ensure no damage is done to new seals.
- b. Stainless bolts should be lubed to reduce the possibility of seizing during tightening.
- c. Level the water chamber side of the intake/discharge manifold to ensure a proper sealing surface. This is most easily accomplished by placing them on a flat surface prior to tightening their clamp bands to the desired torque (see below for Torque Specifications).
- d. Be sure to tighten outer pistons simultaneously on PTFE-fitted pumps to ensure proper torque values.
- e. Ensure proper mating of liquid chambers to manifolds prior to tightening vertical bolts. Overhang should be equal on both sides.
- f. Apply a small amount of Loctite 242 to the shaft interval threads before the diaphragm assembly.
- g. Concave side of disc spring in diaphragm assembly faces toward shaft.

**MAXIMUM TORQUE SPECIFICATIONS (SDP50)**

DESCRIPTION OF PART	TORQUE
Air Valve	5.1 N•m (45 in-lb)
Air Chamber/Center Block	47.5 N•m (35 ft-lb)
Outer Flanges, Rubber & PTFE, Excluding Stainless Steel Inner Pistons	106 N•m (78 ft-lb)
Outer Flanges, Rubber & PTFE, Stainless Steel Inner Pistons	119 N•m (88 ft-lb)
Outer Flanges, Ultra-Flex™	74.6 N•m (55 ft-lb)
Small Clamp Bands	6.6 N•m (58 in-lb)

**Bill of Materials for SDP 50 ALN Pumps**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1	21	200 40 49	ALLEN BOLT	4
1A	203 10 05	AIR DISC	2	22	200 40 30	HEX. NUT	4
2	200 40 39	INLET	1	23	200 40 47	BIG CLAMP	4
3	200 40 37	OUTLET	1	24	200 90 68	ALLEN BOLT	8
4	202 10 02	INNER FLANGE	2	25	022 40 21	HEX. NUT	8
5	202 10 03	OUTER FLANGE	2	26	200 40 53	SMALL CLAMP	8
6	200 40 35	LIQUID CHAMBER	2	27	203 90 11S	SQUARE NUT	4
7	203 21 04	PRIMARY SHAFT	1	28	203 08 03	END CAP	1
8	203 21 03	SLEEVE	1	29	163 40 01	O' RING	1
9	200 40 13	RUBBER RING	2	30	203 40 05	O' RING	1
10	203 40 01	GASKET	2	31	171 27 19S	ALLEN BOLT	3
11	202 40 41	DIAPHRAGM- NEOPRENE	2	32	203 90 10S	ALLEN BOLT	4
12	200 40 43	VALVE BALL- NEOPRENE	4	33	612 90 11S	PLAIN WASHER	7
13	200 40 45	VALVE SEAL- NEOPRENE	4	34	203 90 15/A	SCREW WITH WASHER	1
14	203 10 03	AIR VALVE BODY	1	35	203 90 09	INT. CIRCLIP	1
15	203 40 04	GASKET	1	36	203 98 01	SPOOL ASSEMBLY	1
16	203 10 04	AIR VALVE BODY COVER	1	37	203 98 03	END PLUG ASSEMBLY	1
17	203 40 08	GASKET	1	38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
18	203 40 03	O' RING	4	39	200 97 15	SILENCER	1
19	203 90 13	HEX BOLT	8				
20	210 90 36	PLAIN WASHER	8				

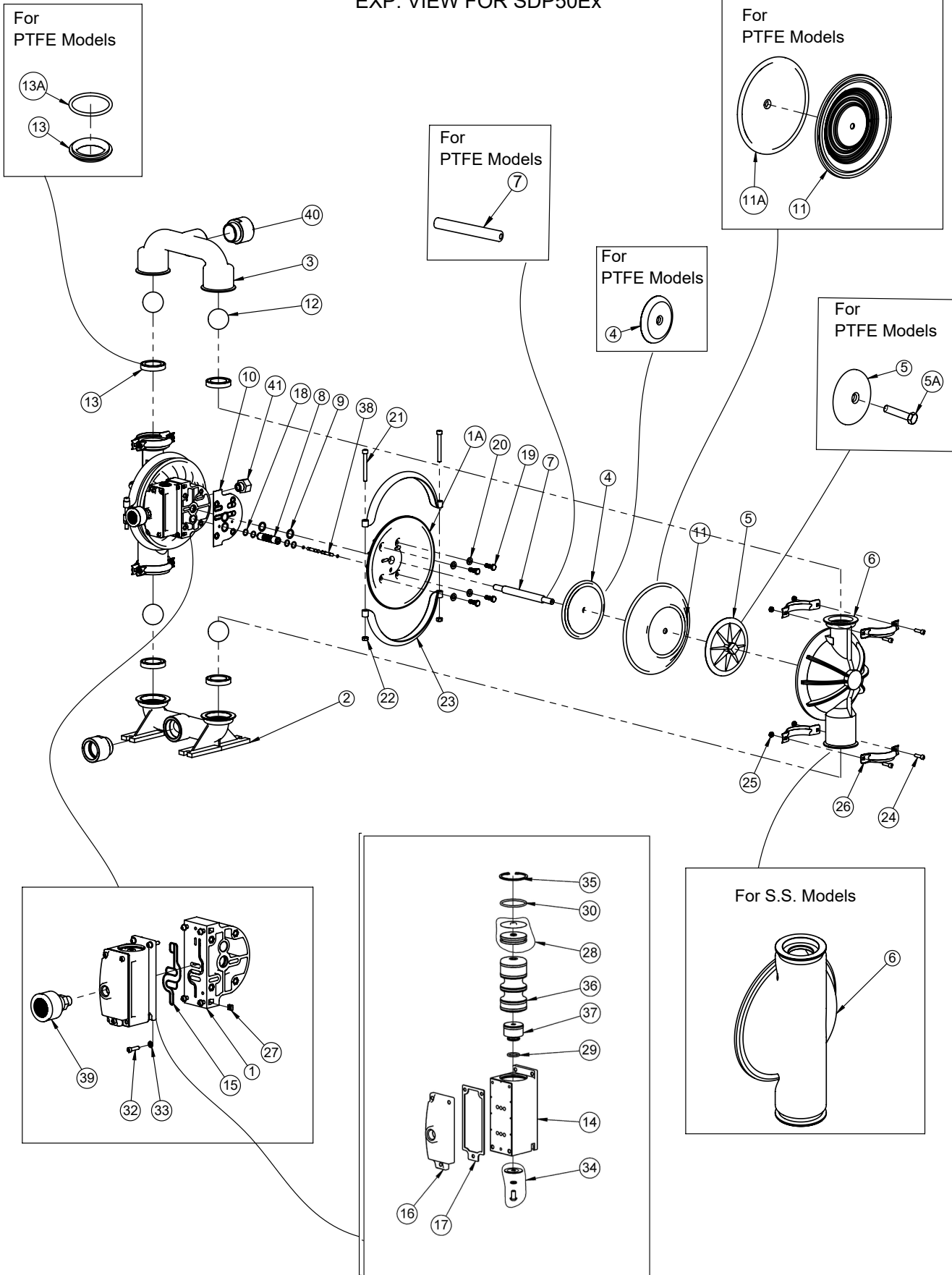
**Note.**

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 10 06	Adaptor 2" BSPT(F)	2	
40	202 10 09	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

# Exploded View for SDP 50 Pump

EXP. VIEW FOR SDP50Ex



## Bill of Materials for SDP 50 ALB Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	200 40 39	INLET	1
3	200 40 37	OUTLET	1
4	202 10 02	INNER FLANGE	2
5	202 10 03	OUTER FLANGE	2
6	200 40 35	LIQUID CHAMBER	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 40 41B	DIAPHRAGM- BUNA N	2
12	200 40 43B	VALVE BALL- BUNA N	4
13	200 40 45B	VALVE SEAL- BUNA N	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 10 06	Adaptor 2" BSPT(F)	2	
40	202 10 09	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1



## Bill of Materials for SDP 50 ALS Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1	22	200 40 30	HEX. NUT	4
1A	203 10 05	AIR DISC	2	23	200 40 47	BIG CLAMP	4
2	200 40 39	INLET	1	24	200 90 68	ALLEN BOLT	8
3	200 40 37	OUTLET	1	25	022 40 21	HEX. NUT	8
4	202 10 02	INNER FLANGE	2	26	200 40 53	SMALL CLAMP	8
5	202 10 03	OUTER FLANGE	2	27	203 90 11S	SQUARE NUT	4
6	200 40 35	LIQUID CHAMBER	2	28	203 08 03	END CAP	1
7	203 21 04	PRIMARY SHAFT	1	29	163 40 01	O' RING	1
8	203 21 03	SLEEVE	1	30	203 40 05	O' RING	1
9	200 40 13	RUBBER RING	2	31	171 27 19S	ALLEN BOLT	3
10	203 40 01	GASKET	2	32	203 90 10S	ALLEN BOLT	4
11	202 41 01	DIAPHRAGM- SANTOPRENE	2	33	612 90 11S	PLAIN WASHER	7
12	202 41 03	VALVE BALL- SANTOPRENE	4	34	203 90 15/A	SCREW WITH WASHER	1
13	202 41 02	VALVE SEAL- SANTOPRENE	4	35	203 90 09	INT. CIRCLIP	1
14	203 10 03	AIR VALVE BODY	1	36	203 98 01	SPOOL ASSEMBLY	1
15	203 40 04	GASKET	1	37	203 98 03	END PLUG ASSEMBLY	1
16	203 10 04	AIR VALVE BODY COVER	1	38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
17	203 40 08	GASKET	1	39	200 97 15	SILENCER	1
18	203 40 03	O' RING	4				
19	203 90 13	HEX BOLT	8				
20	210 90 36	PLAIN WASHER	8				
21	200 40 49	ALLEN BOLT	4				

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 10 06	Adaptor 2" BSPT(F)	2	
40	202 10 09	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 ALH Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	200 40 39	INLET	1
3	200 40 37	OUTLET	1
4	202 10 02	INNER FLANGE	2
5	202 10 03	OUTER FLANGE	2
6	200 40 35	LIQUID CHAMBER	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 43 01	DIAPHRAGM- HYTREL	2
12	202 43 03	VALVE BALL- HYTREL	4
13	202 43 02	VALVE SEAL- HYTREL	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 10 06	Adaptor 2" BSPT(F)	2	
40	202 10 09	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 ALV Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1	22	200 40 30	HEX. NUT	4
1A	203 10 05	AIR DISC	2	23	200 40 47	BIG CLAMP	4
2	200 40 39	INLET	1	24	200 90 68	ALLEN BOLT	8
3	200 40 37	OUTLET	1	25	022 40 21	HEX. NUT	8
4	202 10 02	INNER FLANGE	2	26	200 40 53	SMALL CLAMP	8
5	202 10 03	OUTER FLANGE	2	27	203 90 11S	SQUARE NUT	4
6	200 40 35	LIQUID CHAMBER	2	28	203 08 03	END CAP	1
7	203 21 04	PRIMARY SHAFT	1	29	163 40 01	O' RING	1
8	203 21 03	SLEEVE	1	30	203 40 05	O' RING	1
9	200 40 13t	RUBBER RING	2	31	171 27 19S	ALLEN BOLT	3
10	203 40 01	GASKET	2	32	203 90 10S	ALLEN BOLT	4
11	202 40 41V	DIAPHRAGM- VITON	2	33	612 90 11S	PLAIN WASHER	7
12	200 40 43V	VALVE BALL- VITON	4	34	203 90 15/A	SCREW WITH WASHER	1
13	200 40 45V	VALVE SEAL- VITON	4	35	203 90 09	INT. CIRCLIP	1
14	203 10 03	AIR VALVE BODY	1	36	203 98 01	SPOOL ASSEMBLY	1
15	203 40 04	GASKET	1	37	203 98 03	END PLUG ASSEMBLY	1
16	203 10 04	AIR VALVE BODY COVER	1	38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
17	203 40 08	GASKET	1	39	200 97 15	SILENCER	1
18	203 40 03	O' RING	4				
19	203 90 13	HEX BOLT	8				
20	210 90 36	PLAIN WASHER	8				
21	200 40 49	ALLEN BOLT	4				

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 10 06	Adaptor 2" BSPT(F)	2	
40	202 10 09	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 ALT Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	200 40 39	INLET	1
3	200 40 37	OUTLET	1
4	200 10 27	INNER FLANGE ALT	2
5	200 10 25	OUTER FLANGE ALT	2
5A	200 27 36S	HEX BOLT	2
6	200 10 34	LIQUID CHAMBER ALT	2
7	203 21 05	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	200 40 66N	BACKUP DIAPHRAGM	2
11A	200 36 41T	DIAPHRAGM -PTFE	2
12	200 36 43T	VALVE BALL -PTFE	4
13	202 27 01	VALVE SEAT	4
13A	202 36 01T	O RING -PTFE	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 10 06	Adaptor 2" BSPT(F)	2	
40	202 10 09	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 SSN Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	202 07 01	INLET	1
3	202 07 02	OUTLET	1
4	202 10 02	INNER FLANGE	2
5	202 07 04	OUTER FLANGE	2
6	202 07 03	LIQUID CHAMBER SS	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING FOR BUSH	2
10	203 40 01	GASKET	2
11	202 40 41	DIAPHRAGM- NEOPRENE	2
12	200 40 43	VALVE BALL- NEOPRENE	4
13	200 40 45	VALVE SEAL- NEOPRENE	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 SSB Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1	21	200 40 49	ALLEN BOLT	4
1A	203 10 05	AIR DISC	2	22	200 40 30	HEX. NUT	4
2	202 07 01	INLET	1	23	200 40 47	BIG CLAMP	4
3	202 07 02	OUTLET	1	24	200 90 68	ALLEN BOLT	8
4	202 10 02	INNER FLANGE	2	25	022 40 21	HEX. NUT	8
5	202 07 04	OUTER FLANGE	2	26	200 40 53	SMALL CLAMP	8
6	202 07 03	LIQUID CHAMBER SS	2	27	203 90 11S	SQUARE NUT	4
7	203 21 04	PRIMARY SHAFT	1	28	203 08 03	END CAP	1
8	203 21 03	SLEEVE	1	29	163 40 01	O' RING	1
9	200 40 13	RUBBER RING	2	30	203 40 05	O' RING	1
10	203 40 01	GASKET	2	31	171 27 19S	ALLEN BOLT	3
11	202 40 41B	DIAPHRAGM- BUNA N	2	32	203 90 10S	ALLEN BOLT	4
12	200 40 43B	VALVE BALL- BUNA N	4	33	612 90 11S	PLAIN WASHER	7
13	200 40 45B	VALVE SEAL- BUNA N	4	34	203 90 15/A	SCREW WITH WASHER	1
14	203 10 03	AIR VALVE BODY	1	35	203 90 09	INT. CIRCLIP	1
15	203 40 04	GASKET	1	36	203 98 01	SPOOL ASSEMBLY	1
16	203 10 04	AIR VALVE BODY COVER	1	37	203 98 03	END PLUG ASSEMBLY	1
17	203 40 08	GASKET	1	38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
18	203 40 03	O' RING	4	39	200 97 15	SILENCER	1
19	203 90 13	HEX BOLT	8				
20	210 90 36	PLAIN WASHER	8				

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1



## Bill of Materials for SDP 50 SSS Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	202 07 01	INLET	1
3	202 07 02	OUTLET	1
4	202 10 02	INNER FLANGE	2
5	202 07 04	OUTER FLANGE	2
6	202 07 03	LIQUID CHAMBER SS	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 41 01	DIAPHRAGM- SANTOPRENE	2
12	202 41 03	VALVE BALL- SANTOPRENE	4
13	202 41 02	VALVE SEAL- SANTOPRENE	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 SSH Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	202 07 01	INLET	1
3	202 07 02	OUTLET	1
4	202 10 02	INNER FLANGE	2
5	202 07 04	OUTER FLANGE	2
6	202 07 03	LIQUID CHAMBER SS	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 43 01	DIAPHRAGM- HYTREL	2
12	202 43 03	VALVE BALL- HYTREL	4
13	202 43 02	VALVE SEAL- HYTREL	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 SSV Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	202 07 01	INLET	1
3	202 07 02	OUTLET	1
4	202 10 02	INNER FLANGE	2
5	202 07 04	OUTER FLANGE	2
6	202 07 03	LIQUID CHAMBER SS	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 40 41V	DIAPHRAGM- VITON	2
12	200 40 43V	VALVE BALL- VITON	4
13	200 40 45V	VALVE SEAL- VITON	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 SST Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 10 01	CENTRE PIECE	1
1A	203 10 05	AIR DISC	2
2	202 07 01	INLET	1
3	202 07 02	OUTLET	1
4	200 10 27	INNER FLANGE	2
5	200 27 25S	OUTER FLANGE	2
5A	200 27 36S	HEX BOLT	2
6	202 07 03	LIQUID CHAMBER SS	2
7	203 21 05	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	200 40 66N	BACKUP DIAPHRAGM	2
11A	200 36 41T	DIAPHRAGM -PTFE	2
12	200 36 43T	VALVE BALL -PTFE	4
13	202 27 01	VALVE SEAT	4
13A	202 36 01T	O RING -PTFE	4
14	203 10 03	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 CIN Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 05 01	CENTRE PIECE	1
1A	203 05 02	AIR DISC	2
2	203 05 03	INLET	1
3	203 05 10	OUTLET	1
4	203 05 04	INNER FLANGE	2
5	203 05 06	OUTER FLANGE	2
6	203 05 07	LIQUID CHAMBER	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 40 41	DIAPHRAGM- NEOPRENE	2
12	200 40 43	VALVE BALL- NEOPRENE	4
13	200 40 45	VALVE SEAL- NEOPRENE	4
14	203 05 08	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 05 09	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4
22	200 40 30	HEX. NUT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 CIB Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 05 01	CENTRE PIECE	1
1A	203 05 02	AIR DISC	2
2	203 05 03	INLET	1
3	203 05 10	OUTLET	1
4	203 05 04	INNER FLANGE	2
5	203 05 06	OUTER FLANGE	2
6	203 05 07	LIQUID CHAMBER	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 40 41B	DIAPHRAGM- BUNA N	2
12	200 40 43B	VALVE BALL- BUNA N	4
13	200 40 45B	VALVE SEAL- BUNA N	4
14	203 05 08	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 05 09	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1



## Bill of Materials for SDP 50 CIS Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 05 01	CENTRE PIECE	1
1A	203 05 02	AIR DISC	2
2	203 05 03	INLET	1
3	203 05 10	OUTLET	1
4	203 05 04	INNER FLANGE	2
5	203 05 06	OUTER FLANGE	2
6	203 05 07	LIQUID CHAMBER	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 41 01	DIAPHRAGM- SANTOPRENE	2
12	202 41 03	VALVE BALL- SANTOPRENE	4
13	202 41 02	VALVE SEAL- SANTOPRENE	4
14	203 05 08	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 05 09	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
16	203 10 04	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4
22	200 40 30	HEX. NUT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 CIH Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 05 01	CENTRE PIECE	1
1A	203 05 02	AIR DISC	2
2	203 05 03	INLET	1
3	203 05 10	OUTLET	1
4	203 05 04	INNER FLANGE	2
5	203 05 06	OUTER FLANGE	2
6	203 05 07	LIQUID CHAMBER	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 43 01	DIAPHRAGM- HYTREL	2
12	202 43 03	VALVE BALL- HYTREL	4
13	202 43 02	VALVE SEAL- HYTREL	4
14	203 05 08	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 05 09	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 CIV Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 05 01	CENTRE PIECE	1
1A	203 05 02	AIR DISC	2
2	203 05 03	INLET	1
3	203 05 10	OUTLET	1
4	203 05 04	INNER FLANGE	2
5	203 05 06	OUTER FLANGE	2
6	203 05 07	LIQUID CHAMBER	2
7	203 21 04	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	202 40 41V	DIAPHRAGM- VITON	2
12	200 40 43V	VALVE BALL- VITON	4
13	200 40 45V	VALVE SEAL- VITON	4
14	203 05 08	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 05 09	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.

The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Bill of Materials for SDP 50 CIT Pumps

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	203 05 01	CENTRE PIECE	1
1A	203 05 02	AIR DISC	2
2	203 05 03	INLET	1
3	203 05 10	OUTLET	1
4	0203 05 05	INNER FLANGE CI	2
5	200 27 25S	OUTER FLANGE SST	2
5A	200 27 36S	HEX BOLT	2
6	203 05 07	LIQUID CHAMBER	2
7	203 21 05	PRIMARY SHAFT	1
8	203 21 03	SLEEVE	1
9	200 40 13	RUBBER RING	2
10	203 40 01	GASKET	2
11	200 40 66N	BACKUP DIAPHRAGM	2
11A	200 36 41T	DIAPHRAGM -PTFE	2
12	200 36 43T	VALVE BALL -PTFE	4
13	202 27 01	VALVE SEAT	4
13A	202 36 01T	O RING -PTFE	4
14	203 05 08	AIR VALVE BODY	1
15	203 40 04	GASKET	1
16	203 05 09	AIR VALVE BODY COVER	1
17	203 40 08	GASKET	1
18	203 40 03	O' RING	4
19	203 90 13	HEX BOLT	8
20	210 90 36	PLAIN WASHER	8
21	200 40 49	ALLEN BOLT	4

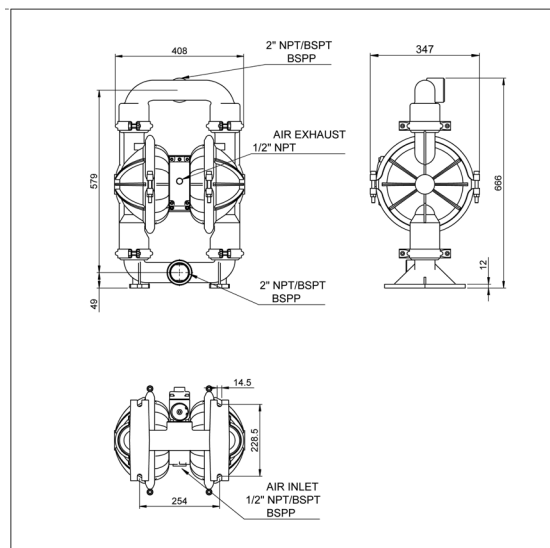
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
22	200 40 30	HEX. NUT	4
23	200 40 47	BIG CLAMP	4
24	200 90 68	ALLEN BOLT	8
25	022 40 21	HEX. NUT	8
26	200 40 53	SMALL CLAMP	8
27	203 90 11S	SQUARE NUT	4
28	203 08 03	END CAP	1
29	163 40 01	O' RING	1
30	203 40 05	O' RING	1
31	171 27 19S	ALLEN BOLT	3
32	203 90 10S	ALLEN BOLT	4
33	612 90 11S	PLAIN WASHER	7
34	203 90 15/A	SCREW WITH WASHER	1
35	203 90 09	INT. CIRCLIP	1
36	203 98 01	SPOOL ASSEMBLY	1
37	203 98 03	END PLUG ASSEMBLY	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY	1
39	200 97 15	SILENCER	1

### Note.

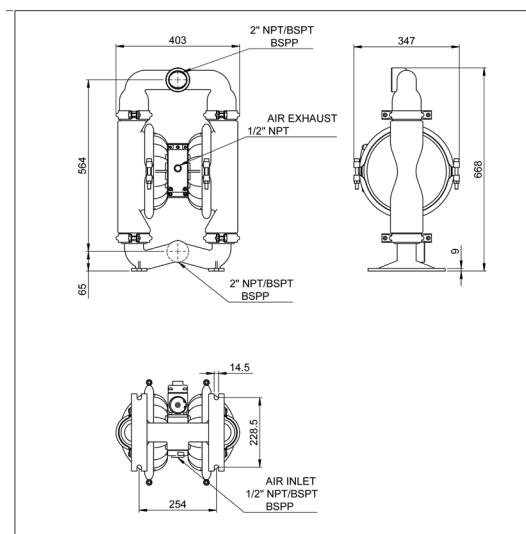
Above all parts are common for CR (NPT), CG (BSPT) & CP (BSPP) Pumps.  
The additional parts for CG (BSPT) & CP (BSPP) pumps model are as follows

ITEM NO	PART NUMBER	DESCRIPTION	CG MODELS	CP MODELS
40	202 07 05S	Adaptor 2" BSPT(F)	2	
40	202 07 07S	Adaptor 2" BSPP(F)		2
41	202 04 08	Adaptor 3/4" BSPT(F)	1	
41	202 04 05	Adaptor 3/4" BSPP(F)		1

## Dimensional Data



SDP 50 AL/N/B/S/H/V/T



SDP 50 SS/CI/ N/B/S/H/V/T

## Repair Kits for SDP 50 ALX / SSX and CIX Pumps

Repair Kits consist of everything you need to quickly restore the pump. Repair Kits contain one set of Diaphragms, one set of balls, one set of seats or seats+Orings, secondary shaft complete with seals, air valve spool complete with fitted seals, all gaskets, end caps with fitted rings and other wear parts needed to rebuild the pump. Repair kits are threading independant.

Repair KIT Ordering No	Suitable for
203 97 10N	SDP 50 ALN / SSN / CIN
203 97 10B	SDP 50 ALB / SSB / CIB
203 97 10S	SDP 50 ALS / SSS / CIS
203 97 10H	SDP 50 ALH / SSH / CIH
203 97 10V	SDP 50 ALV / SSV / CIV
203 97 10T	SDP 50 ALT / SST / CIT

## Air Valve Replacement Kits for SDP 50 ALX / SSX Pumps

Air Valve Replacement Kit consists of a complete operational air valve assembly complete. Consisting of Air Valve Body, End Plates, Spool and all seals, o rings and gaskets.

Replacement KIT Ordering No	Suitable for
203 97 01	NPT Fitted ALX or SSX Pumps With Any Diaphragm Variant BSPT Fitted ALX or SSX Pumps With Any Diaphragm Variant BSPP Fitted ALX or SSX Pumps With Any Diaphragm Variant

## Air Valve Replacement Kits for SDP 50 CIX Pumps

Air Valve Replacement Kit consists of a complete operational air valve assembly complete. Consisting of Air Valve Body, End Plates, Spool and all seals, o rings and gaskets.

Repair KIT Ordering No	Suitable for
203 97 12	NPT Fitted CIX Pumps With Any Diaphragm Variant
	BSPT Fitted CIX Pumps With Any Diaphragm Variant
	BSPP Fitted CIX Pumps With Any Diaphragm Variant

## Repair and Replacement Kits

ITEM NO.	PART NUMBER	DESCRIPTION	AL / SS Pumps	CI	ALX / SSX & CIX Pumps					
			203 97 01 Replacement Kit	203 97 12 Replacement Kit	Repair Kit 2039710B	Repair Kit 2039710N	Repair Kit 2039710V	Repair Kit 2039710S	Repair Kit 2039710H	Repair Kit 2039710T
9	200 40 13	RUBBER RING FOR BUSH			2	2	2	2	2	2
10	203 40 01	GASKET FOR CENTRE PIECE & AIR DISC			2	2	2	2	2	2
11	202 40 41B	DIAPHRAGM- BUNA N			2					
11	202 40 41	DIAPHRAGM- NEOPRENE				2				
11	202 40 41V	DIAPHRAGM- VITON					2			
11	202 41 01	DIAPHRAGM- SANTOPRENE						2		
11	202 43 01	DIAPHRAGM- HYTREL							2	
11	200 40 66N	BACKUP DIAPHRAGM								2
11A	200 36 41T	DIAPHRAGM -PTFE								2
12	200 40 43B	VALVE BALL- BUNA N			4					
12	200 40 43	VALVE BALL- NEOPRENE				4				
12	200 40 43V	VALVE BALL- VITON					4			
12	202 41 03	VALVE BALL- SANTOPRENE						4		
12	202 43 03	VALVE BALL- HYTREL							4	
12	200 36 43T	VALVE BALL -PTFE								4
13	200 40 45B	VALVE SEAL- BUNA N			4					
13	200 40 45	VALVE SEAL- NEOPRENE				4				
13	200 40 45V	VALVE SEAL- VITON					4			
13	202 41 02	VALVE SEAL- SANTOPRENE						4		
13	202 43 02	VALVE SEAL- HYTREL							4	
13	202 27 01	VALVE SEAT								4
13A	202 36 01T	O RING -PTFE								4
14	203 10 03	AIR VALVE BODY	1							
14	203 05 08	AIR VALVE BODY		1						
15	203 40 04	GASKET FOR AIR VALVE BODY	1	1	1	1	1	1	1	1
16	203 10 04	AIR VALVE BODY COVER	1							



ITEM NO.	PART NUMBER	DESCRIPTION	AL / SS Pumps	CI	ALX / SSX & CIX Pumps					
			203 97 01 Replacement Kit	203 97 12 Replacement Kit	Repair Kit 2039710B	Repair Kit 2039710N	Repair Kit 2039710Y	Repair Kit 2039710S	Repair Kit 2039710H	Repair Kit 2039710T
16	203 05 09	AIR VALVE BODY COVER		1						
17	203 40 08	GASKET FOR AIR VALVE BODY COVER	1	1	1	1	1	1	1	1
18	203 40 03	O' RING			4	4	4	4	4	4
27	203 90 11S	SQUARE NUT	4	4						
28	203 08 03	END CAP	1	1	1	1	1	1	1	1
29	163 40 01	O' RING	1	1	1	1	1	1	1	1
30	203 40 05	O' RING	1	1	1	1	1	1	1	1
31	171 27 19S	ALLEN BOLT	3	3						
32	203 90 10S	ALLEN BOLT	4	4						
33	612 90 11S	PLAIN WASHER	7	7						
34	203 90 15/A	SCREW WITH WASHER	1	1	1	1	1	1	1	1
35	203 90 09	INT. CIRCLIP	1	1	1	1	1	1	1	1
36	203 98 01	SPOOL ASSEMBLY	1	1	1	1	1	1	1	1
37	203 98 03	END PLUG ASSEMBLY	1	1	1	1	1	1	1	1
38	203 98 02	SECONDARY SHAFT ASSEMBLY			1	1	1	1	1	1
39	200 97 15	SILENCER			1	1	1	1	1	1

## EU DECLARATION OF CONFORMITY

### Object of declaration

**PRODUCT** : AIR OPERATED DOUBLE DIAPHRAGM PUMP

**MODEL** : SDP50 Series

**MANUFACTURER'S NAME** : TERYAIR EQUIPMENT PVT. LTD.

**ADDRESS** : SITE - 1 : BUILDING A - 1/2, 102 TO 105 & BUILDING C 12 & 13,  
TIRUPATI UDYOG NAGAR, SATIVALI ROAD, VASAI (E),  
PALGHAR: 401208.  
SITE - 2: AUGUSTINE - II, COLACO INDUSTRIAL COMPLEX,  
GALA NO - 101 TO 107, SATIVALI ROAD, VILLAGE WALIV,  
VASAI (E), PALGHAR: 401208

To provide presumption of conformity in order to directive 2014/34/EU; the following harmonized standards and/or other normative documents as referenced within the following official journals are applied:

**APPLICABLE DIRECTIVE:** ATEX DIRECTIVE (2014/34/EU)

### APPLICABLE STANDARDS:

**EN ISO 80079-36: 2016** : Explosive atmospheres —Part 36: Non-electrical equipment for explosive atmospheres —Basic method and requirements.

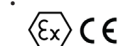
**EN ISO 80079-37:2016** : Explosive atmospheres —Part 37: Non-electrical equipment for explosive atmospheres —Non- electrical type of protection constructional safety 'c', control of ignition sources 'b', liquid immersion 'k'.

**Notified body to whom Technical file has logged with:** - Technicka Inspekcja (Ref: 1354).

**DECLARATION:** - TERYAIR EQUIPMENT PVT. LTD., declare that under our sole responsibility for the supply of the product defined above, the said product complies with all the applicable Directives, Regulations and all essential Health and Safety requirements applying to it.

I, the undersigned, hereby declare that the product specified above conforms to the above standard(s).

**ATEX MARKING APPLIED** :



Please Refer ATEX Rating for Teryair Aodd Models Table

Signed for and on behalf of

TERYAIR EQUIPMENT PVT. LTD.

Place of Issue: Vasai

Date:

## SUMMARY FOR THE ATEX RATING FOR TERYAIR AODD MODELS

Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating
06 (1/4")	SDP	Aluminium	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
		Stainless Steel	Stainless Steel	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db <b>I M2 Ex h I Mb (IP65)</b>
				Buna-N	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				Viton-FKM	
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				Hytrel	
				PTFE	
12 (1/2")	DP/SDP	Aluminium	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
	SDP	Stainless Steel	Stainless Steel	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db <b>I M2 Ex h I Mb (IP65)</b>
				Buna-N	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				Viton-FKM	
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				Hytrel	
				PTFE	
25 (1")	DP / SDP	Aluminium / Stainless Steel	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	

## SUMMARY FOR THE ATEX RATING FOR TERYAIR AODD MODELS

Pump Size	Series	Wetted Materials	Center Section	Dipharagm Materials	ATEX Rating
40 (1-1/2")	DP / SDP	Aluminium / Stain- less Steel	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
50 (2")	DP / SDP	Aluminium / Stain- less Steel	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
	SDP	Cast Iron	Cast Iron	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db <b>I M2 Ex h I Mb (IP65)</b>
				Buna-N	
				Viton-FKM	"II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b> "
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				Hytrel	
				PTFE	
75 (3")	DP / SDP	Aluminium	Aluminium	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db (IP65)
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65)
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65)
				Hytrel	
				PTFE	
	SDP	Cast Iron	Cast Iron	Neoprene	II 2 GD Ex h IIC T6 Gb Ex h IIIC T85°C Db <b>I M2 Ex h I Mb (IP65)</b>
				Buna-N	
				Viton-FKM	II 2 GD Ex h IIC T3 Gb Ex h IIIC T200°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				Sentoprene	II 2 GD Ex h IIC T5 Gb Ex h IIIC T100°C Db (IP65) <b>I M2 Ex h I Mb (IP65)</b>
				Hytrel	
				PTFE	



# Warranty Certificate

Every product manufactured by Teryair  
is built to meet the highest standards of quality.

Teryair warrants that the Products, accessories and parts manufactured or supplied by the company be free from defects in material and workmanship for a period of six months from date of Teryair authorized dealer invoice to customer, or one year from date of Teryair invoice to dealer, whichever is earlier. Failure due to normal wear, misapplication, or abuse is, of course, excluded from this warranty.

Since the use of Teryair products and parts is beyond our control, Teryair cannot guarantee the suitability of any product or part for a particular application and Teryair shall not be liable for any consequential damage or expense arising from the use or misuse of its products on any application. Teryair does not warranty bought out products or components such as electric motors and hardware but will assist in directing warranty queries to the dealer/manufacturer responsible. Teryair responsibility is limited solely to replacement or repair of defective Teryair products or components.

Dealer/End User shall have no right or remedy and Teryair shall have no liability or obligation under the warranty, if: (i) a Product is altered, changed, modified or tampered with in any way; (ii) a Product is damaged after deposit with the transporter for shipment; (iii) a Product is not properly preserved, packaged, stored, processed or handled after receipt; (iv) a Product is not used and maintained in accordance with Teryair's recommended operating and maintenance manuals, instructions and procedures, if any; (v) a Product is not properly incorporated or installed in, or not properly combined with, an Other Product; (vi) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, a failure, substandard performance or other issue with another product, material, component or part not supplied by Teryair; (vii) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, compliance with any design, specification or other specific requirement of Dealer/End User; (viii) a Product is used in a manner, with a substance or for a purpose other than the normal manner, substance and purpose for which it is intended or is otherwise subjected to abnormal use or service; (ix) a Product is subjected to a power surge, brown out or other similar occurrence; (x) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, normal wear and tear of such Product (including, without limitation, things such as worn seals, diaphragms, balls, O rings, gaskets, chisels, cutters, hoses and other such wearing components; (xi) the issue with a Product is directly or indirectly.

Model Number : SDP50 Series

Serial Number :

Dated :

Ajay Bhagat, Q.A. Manager  
(Company Seal)

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