

Instructions & Parts List

VALVE/GASKET KIT (Level II) - Part Number 32229882 For Model 7100

PARTS LIST

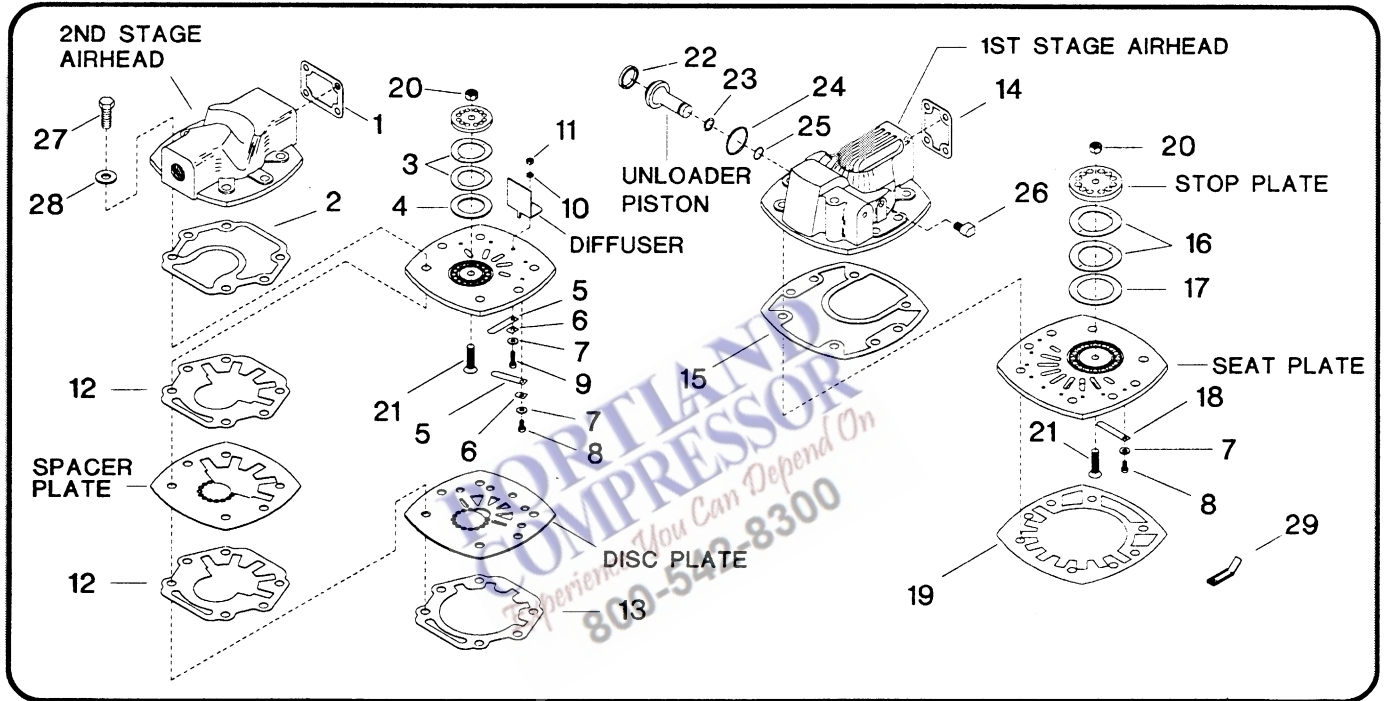


Figure 1 - Parts Breakdown

REF. NBR.	PART NUMBER	DESCRIPTION	QTY.
1-1	32153827	GASKET, MANIFOLD	1
1-2	32252801	GASKET, HEAD - 2ND STAGE	1
1-3	30221394	SPRING, DISCHARGE VALVE	2
1-4	30215917	PLATE, DISCHARGE VALVE	1
1-5	30220115	VALVE, FINGER - 2ND STAGE VALVE PLATE ASSY.	5
1-6	32228306	RETAINER, VALVE - FINGER - SECOND STAGE	5
1-7	32217382	WASHER, BELLEVILLE - 1/4"	14
1-8	32035511	SCREW, FILLISTER HEAD - 1/4-20x3/8"	13
1-9	32224008	SCREW, FILLISTER HEAD - 1/4-20x3/4"	1
1-10	32035479	LOCKWASHER, SPRING - 1/4"	1
1-11	95416335	NUT, HEX - 1/4-20	1
1-12	32252819	GASKET, SPACER PLATE - 2ND STAGE	2
1-13	32252827	GASKET, VALVE PLATE - 2ND STAGE	1
1-14	32153801	GASKET, MANIFOLD - DISCHARGE - 1ST STAGE	1

REF. NBR.	PART NUMBER	DESCRIPTION	QTY.
1-15	32267502	GASKET, AIRHEAD - 1ST STAGE	2
1-16	30221501	SPRING, VALVE - DISCHARGE - 1ST STAGE	2
1-17	30181499	PLATE, VALVE - DISCHARGE - 1ST STAGE	1
1-18	30220115	VALVE, FINGER - 1ST STAGE VALVE PLATE ASSY.	9
1-19	32267510	GASKET, VALVE PLATE - 1ST STAGE	1
1-20	97166946	NUT, WHIZ-LOCK - 7/16-14	2
1-21	32223927	BOLT, VALVE	2
1-22	32254740	SEAL, UNLOADER PISTON	1
1-23	32188385	O-RING - UNLOADER PISTON	1
1-24	95026183	O-RING	1
1-25	95935862	O-RING	1
1-26	95040143	ELBOW, TUBE - 3/8x1/4"	1
1-27	95104196	CAPSCREW, HEX - 1/2-13x2"	6
1-28	32279408	WASHER, 1/2"	6
1-29	32229361	GUIDE, FINGER VALVE INSTALLATION	1

NOTE: UNITS EQUIPPED WITH OLD STYLE UNLOADER PISTONS ALSO REQUIRE TWO (2) UNLOADER PISTON SEALS (32172629) AND TWO (2) LOCKNUTS (95077418)

INSTRUCTIONS

WARNING

Hazardous voltage.
Can cause severe injury or death.

Always disconnect main power supply before performing maintenance or repair work on this compressor.

WARNING

Compressed air has great force.
Can cause severe injury or death from flying parts.

Always release pressure from the air compressor, and all associated tubing and components, before servicing compressor.

I. VALVE PLATE REPLACEMENT.

1). VALVE REMOVAL.

- a). Disconnect all tubing to the airhead and unloader cover.
- b). Remove the capscrews from the intercooler connecting it to the airheads.
- c). Disassemble the unloader covers by unscrewing the capscrews from the first stage airheads.
- d). Remove the o-ring from the inside groove of the first stage airhead or from the unloader cover and pull the unloader piston assembly from the airhead.
- e). Remove the tube elbows from the first stage airheads as shown in the parts list.
- f). Unscrew the airhead capscrews and separate the airheads and valve assemblies from the cylinders.
- g). Place a wrench on the flats of the unloader piston assembly and unscrew the locknut from the unloader piston.
- h). Remove the washer retaining plate, piston washer and the o-ring from the unloader piston.
- i). Unscrew the hex locknut (a nut splitter may be required) and separate the ring valve parts.
- j). Remove the fillister head screws along with the flat washers and then the finger valves from the bottom of the seat plate.

2). VALVE CLEANING.

Paying special attention to the valve seat area, carefully clean the seat plate with a stiff bristle brush. **DO NOT USE A WIRE BRUSH.** If necessary, use a non-flammable safety solvent to loosen dirt, oil or carbon deposits. Should it be necessary to scrape, do so lightly to prevent marring the valve seat area. Thoroughly clean all gasket seating surfaces on the airheads, seat plates, spacer plate, disc plate and cylinders of old gasket material and dirt to allow proper seating of the new gaskets.

3). VALVE ASSEMBLY.

- a). Reassemble the valve parts in their proper sequence (see Fig. #1).
- b). Position the new valve plate, valve spring(s), socket head screw and lock nut. (The socket head screw and lock nut must be replaced.)
- c). Make absolutely certain that the discharge valve plate and valve spring are centered on the stop plate guide; otherwise, the valve will be damaged when tightened.
- d). Install the new socket head screw through the seat plate and valve parts.
- e). Screw the locknut onto the socket head screw.
- f). While holding the valve bolt, dry torque the locknut to 25-27 Ft. Lbs. (33-36 Nm). (Use a torque wrench to torque locknut, not an air impact tool).
- g). Place the disposable finger valve installation guide onto a valve port (see Fig. #2). Set a new finger valve into the guide.
- h). Lay a new finger valve retainer (for second stage only) and a new Belleville washer on the finger valve.
- i). Screw in a new fillister head screw and torque to 48-72 In. Lbs. (5-8 Nm). Note that there is one longer fillister head screw for the second stage valve plate assembly (Ref. #1-9).
- j). Carefully remove guide and repeat for each valve port.
- k). Replace the diffuser on the second stage valve plate and install the new spring lockwasher and hex nut onto fillister head screw (Ref. #1-9).

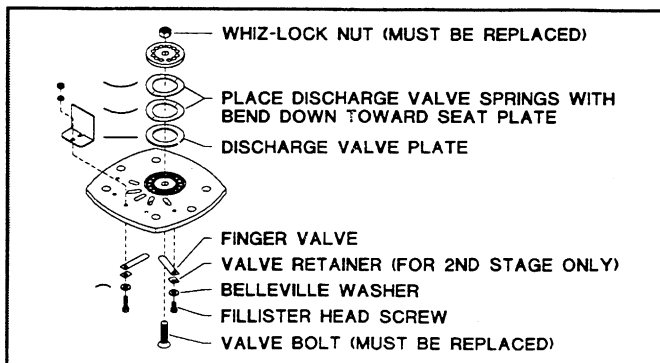


Figure 2 - Typical Valve Arrangement

NOTICE

During disassembly, note the positions and locations of parts to facilitate easier assembly.

Torque values given are for threads lubricated with oil or grease unless otherwise specified.

Handle valves with care so as not to nick or scratch them.

- l). Hold the fillister head screw with a screwdriver and torque the hex nut to 48-72 In. Lbs. (5-8 Nm).
- m). Make certain finger valves lie flat against the valve port holes. If not, remove finger valve(s), turn finger valve(s) over, and repeat installation.
- n). Replace the new gaskets as shown in parts list and lay the valve plate assembly on the cylinder.
- o). Replace the airhead along with an airhead gasket on the valve plate assembly.
- p). Locate the airhead capscrews in the airhead and tighten hand-tight.
- q). Dry torque the airhead capscrews to 75 Ft. Lbs. (102 Nm) using a cross pattern and tightening each cap screw approximately half a turn at a time.

II. INLET UNLOADER ASSEMBLY.

- a). Place the new unloader piston seal and washer retaining plate onto the unloader piston in the order shown in the parts list.
- b). Screw the new locknut (use the correct locknut for your unloader piston), onto the unloader piston using no lubricant on threads and torque to 90-100 In. Lbs. (10-11 Nm). **NOTE: OVER-TORQUING OF LOCKNUT CAN CAUSE PREMATURE FAILURE OF UNLOADER PISTON.**
- c). Apply o-ring lubricant suitable for 200°F on the o-ring (Ref. #1-23) and carefully slide the new o-ring over the unloader piston shaft and into the groove.
- d). After the o-ring is in place apply more o-ring lubricant to the o-ring and the unloader piston shaft. Install the unloader piston assembly back into the first stage airhead.
- e). Place the new o-ring (Ref. #1-24) into the inside groove of the first stage airhead or over the unloader cover and apply lubricant to the o-ring.
- f). Locate the unloader cover back on the first stage airhead and torque the capscrews to 120-144 In. Lbs. (13-16 Nm). Install the new tube elbow into the side of the airhead as shown in parts list.
- g). Replace the intercooler head gaskets with the new gaskets supplied.
- h). Re-attach the intercooler manifolds to the airheads and torque capscrews to 15 Ft. Lbs. (20 Nm) in a cross pattern.
- i). Reconnect and tighten all tubing to the airheads and unloaders.
- j). Restart compressor and check for air leaks. Allow unit to operate at normal pressure.
- k). After 10 minutes and 30 minutes of operation, retorque all airhead capscrews to 75 Ft. Lbs. (102 Nm).

See instruction manual for additional information.

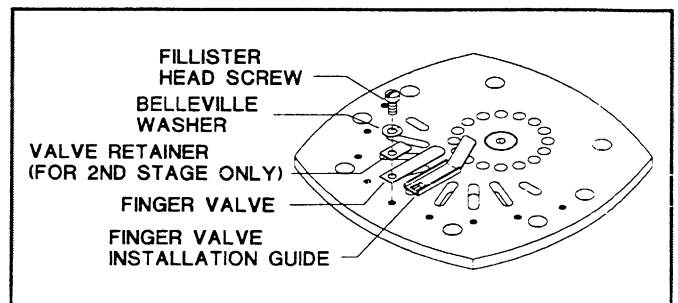


Figure 3 - Typical Valve Arrangement