

BARE PUMP'S PARTS

N°	CODE		DENOMINATION	QTY.
	CSLV 60BR / CSLV 70BR	CSLV 80BR		
1	*	*	UNC 3/8" x 3" Allen head bolt (cl 12.9)	08
2	*	*	UNC 3/8" x 1.1/2" Allen head bolt (cl 12.9)	08
3	*	*	UNC 5/16" x 2" Allen head bolt (cl 12.9)	12
4	830.1083-0	830.1083-0	Washer cooper (kit with 10 pcs)	04
5	*	*	3/8" lock washer	12
6	709.1691-0/AT	709.1691-0/AT	Cylinder head	02
7	830.1999-0	830.1999-0	Upper gasket kit	01
8	809.1787-0/AT	809.1787-0/AT	Valve plate	02
9	830.1898-0	830.1898-0	Valve plate kit (kit is for 1 valve plate)	02
10	709.1708-0/AT	709.1708-0/AT	d = 2.1/2" and D = 120 mm cylinder	02
11	*	*	UNC 3/8" X 1" head hex bolt (G-2)	12
12	830.1078-0	830.1078-0	HP 2.1/2" ring kit (kit is for 1 cylinder)	02
13	830.1079-0	830.1079-0	HP 2.1/2" piston	02
14	019.0028-0/AT	019.0028-0/AT	Needle bearing	02
15	809.1813-0/AT	809.1813-0/AT	HP connecting rod with needle bearing (kit)	02
16	809.1082-C/AT	809.1082-C/AT	Guide bushing connecting rod (kit with 4 pcs)	08
17	*	*	5/16" lock washer	12
18	809.1810-0/AT	809.1810-0/AT	LP connecting rod (kit)	02
19	016.0121-0/AT	016.0121-0/AT	LP120 mm piston	02
20	830.1091-0	830.1091-0	LP 120 mm ring kit (kit is for 1 piston)	02
21	709.1346-0/AT	709.1346-0/AT	Flywheel	01
22	830.2001-0	830.2001-0	Crankshaft (kit)	01
23	60267503/AT	60267503/AT	Key	01
24	709.1805-0/AT	709.1805-0/AT	Crankcase	01
25	003.0736-0/AT	003.0736-0/AT	3/4" plug	01
26	003.0739-0/AT	003.0739-0/AT	1/2" plug	(03)(01)
27	830.0775-0/AT	830.0775-0/AT	3/4" oil level sight	01
28	019.0013-7/AT	019.0013-7/AT	Roller bearing of crankshaft	02
29	830.2000-0	830.2000-0	Crankcase gasket kit	01
30	709.1806-0/AT	709.1806-0/AT	Flange	01
31	023.0432-0/AT	023.0432-0/AT	Oil Seal	01
32	*	*	UNC 5/16" x 1" Allen head bolt (cl 12.9)	04
33	830.2002-0	830.2002-0	Labyrinth cover with gasket deflector (kit)	01
34	*	*	M6 x 1,0 x 15 head hex bolt (G -5.8)	08
35	*	*	M6 lock washer	08
36	830.2003-0	830.2003-0	Flange to adjust with bolt (kit)	01
37	20517005/AT	-	Intercooler adaptor	02
38	003.0509-0/AT	003.0509-0/AT	3/4" nipple	02
39	830.2006-0	830.2006-0	5/8" x 1/2" straight connection (kit with 2 pcs)	08
40	003.0151-5/AT	003.0151-5/AT	3/4" MF elbow	02
41	21011030/AT	21011030/AT	3/4" x 70 mm nipple	02
42	709.1814-0/AT	709.1814-0/AT	Intercooler adaptor with hole 1/2" LE	02
43	-	709.1833-0/AT	Intercooler adaptor with hole 1/2" LD	02
44	-	003.0640-0/AT	1/2" x 5/8" elbow	02
45	809.1815-0/AT	809.1815-0/AT	Crankcase dipstick breather	01
46	21011002/AT	21011002/AT	3/4" x 3/4" straight connection	02
47	830.1263-0	830.1263-0	1" air filter (optional)	02
48	830.1257-0	830.1257-0	Air filter element (optional)	02

* Part available in the market (not sold by Schulz S.A.).

Maintenance instruction

1. The for (4) parts of connecting rod (N. 15 and 18) are unique pair of assembly. The connecting rod won't work well if its pairs is not assembled and if the right torque (30.N.m- 22.0 lbf.ft – 264.0 lbf.in) is not applied in the bolt n. 3.
2. When assembling the bolt Item 1A (3/8" x 3"), indicated in the photo, do not mount the lock washer the bolts (4 pieces) that are closer to the center, only the periphery.
3. The connecting rod (superior and inferior parts) and flange threaded (36) should be lubricated whit lubricant Bisulfate Molybdenum , paste G.

BOLTS					
POSITION		TOOL (KEY)	lbf.in	N.m	lbf.ft
(T1)	1	Hexagonal key 5/16"	486.0	55.0	40.5
(T2)	2	Hexagonal key 5/16"	486.0	55.0	40.5
(T3)	3	Hexagonal key 1/4"	264.0	30.0	22.0
(T4)	9	Hexagonal key M 2,5	19.0	2.2	1.6
(T5)	9	Hexagonal key M 3	35.0	4.0	2.9
(T6)	11	Open ended spanner/star 9/16"	256.0	29.0	21.0
(T7)	22	Socket wrench 1.1/4"	1124.0	127.0	93.6
(T8)	32	Hexagonal key 1/4"	264.0	30.0	22.0
(T9)	34	Open ended spanner/star M 10	62.0	7.0	5.1
(T10)	36	Hexagonal key 1/8"	52.8	6.0	4.4

Table 1 – Torque especification for bolts.

TROUBLESHOOTING TIPS

EVENTUAL DEFECT	PROBABLE CAUSE	SOLUTION
Motor does not start or does not restart.	Voltage drop or electrical supply is out. Installation does not match local technical standard.	Check the installation and/or wait for the electrical supply stabilization.
	Damaged electric motor (burned or defective rotor).	Send it to authorized technical of the motor.
	Compressed air retained in intercooler.	Relieve the pressure through the connection.
	Air returns by check valve.	Verify check valve, clean it or change kit 55 or valve 54 .
	Damaged pressure switch or unfastened electrical connections 72 .	Fasten again the electrical connections or replace the pressure switch 68, 69, 70 and 71 .
	Start key whit button / lever of pressure switch or button emergency, when installed worked.	Reset button. If it occurs again, check the installation or the key.
	Compressor unit is not rotating (lack of lubricant oil).	Replace the damaged components and put the oil back. See Technical Data table.
Motor does not turn off with maximum pressure.	Pressure switch is not regulated.	Unplug the motor and regulate the pressure switch.
	Damaged pressure switch.	Replace the pressure switch.
Compressor does not pump out in maximum pressure	Pilot valve is not regulated.	Adjust valve 64 and 65 .
	Pilot valve is damaged.	Replace it.
	Discharge valve is locked (closed).	Adjust the valve 58 or replace kit.
Compressor does not reach maximum pressure.	Leakage in fittings, tubing, upper gaskets or in pneumatics.	Change the damaged components or fasten fittings 43, 44, 97, 98, 100, 101, 102 and (7).
	Valves do not seal.	Adjust or replace valve plates (8).
	Air consumption higher than compressor capacity.	Check compressor's capacity.
Lubricant oil with unusual color.	Oil change did not happen when recommended.	Change the oil as follows: 1st change: after 8 working hours; 2nd change: 40 working hours after the 1st change. Other changes must happen every 200 hundred working hours or 2 months (whichever occurs first).
	Wrong oil.	See Technical Data table.
	Water mixed with oil.	Change the oil.
Very high consumption of lubricant oil. Compressors usually use more oil in the first 200 working hours until rings are smoothly adjusted.	Air filter element clogged.	Change it (48).
	Oil leakage.	Find it and eliminate it.
	Admission valve is not properly operating.	Adjust or replace the valve plates (8).
	Rings or cylinder with wear.	Replace parts (10), (12) and (20)
	Rings or cylinders with premature wear because of impurities.	Replace the parts, check the causes and eliminate them to avoid recurrence.
	Wrong oil (low viscosity).	See Technical Data table.
	Crankcase oil volume above specification.	Remove the oil excess (the ideal level is in the middle of the oil level sight 27).
Excessive pressure drop between the air receiver and the working place.	Pressure gauge does not indicate right pressure.	Replace pressure gauge 73 .
	Air leakage, obstruction or tubing wrong dimensions (tube diameter is too small).	Eliminate leakage and obstruction and re-dimension tubing.
Air receiver's filling up time above specified in Technical Data Table.	Leakage in fittings, intercooler or upper gaskets.	Change damaged parts or fasten fittings 43, 44, 97, 98, 100, 101, 102 and (7) again.
	Valves do not seal.	Adjust or replace valve plates (8).
	Loose belt.	Stretch belt 13 and 14 .
	Motor pulley or motor out of specification.	Check the Technical Data Table and replace it
Overheating.	Operating in a non-ventilated area.	Improve local conditions.
	Working pressure above the indicated one.	Adjust the pressure switch and never operate the equipment above the maximum working pressure specified .
	Incorrect rotation direction.	Invert any of the main wires.
	Too much dust on the compressor.	Clean the compressor externally.
	Valves do not seal.	Adjust or replace valve plates (8).
	Motor pulley or motor out of specification.	Check the Technical Data table and change it.
	Air leakage in fittings, aftercooler or upper gaskets.	Change the damaged parts or fasten fittings 43, 44, 97, 98, 100, 101, 102 and (7).
	Air consumption higher than compressor's capacity.	Check compressor's capacity.
	Filter element clogged.	Change it (48).

TROUBLESHOOTING TIPS

EVENTUAL DEFECT	PROBABLE CAUSE	SOLUTION
Abnormal noise or vibration.	Loose fastening elements.	Find and fasten them.
	Compressor's unit internal parts are worn out.	Replace the damaged parts.
	Check valve is making noise.	Replace valve kit 55 or valve 54 .
	Broken 2nd stage gasket (compressor operates with load excess in one cylinder)	Replace gasket (7).
	Broken air receiver foot/base.	Replace the air receiver (Do not weld on air receiver).
	Loose belt.	Stretch belt 13 and 14 .
	Not aligned pulley/flywheel.	Align pulley/flywheel 26 , 27 , 28,29 , 30 , 31 , 32 and (21).
	Rotation above specification	Check the Technical Data Table and replace it.
	Tapered roller bearings with clearance.	Adjust bearing through flange regulation (36).
	Flywheel (21) loose.	Remove the belt guard and tighten it.
Pressure switch relief valve leaks after compressor reaches maximum pressure.	Belt loose or not aligned.	Adjust it.
	Check valve does not seal because of impurities between piston and seating.	Clean or replace valve kit 55 or valve 54 .
Premature wearing of the compressor unit internal parts.	Pressure switch is not connected to electric motor's start key.	Unplug the motor and connect the pressure switch.
	Operating in non-adequate environment.	Improve local conditions.
Very frequent starts.	Recommended oil change interval was not followed.	Change the oil as follows: 1st change: after 8 working hours; 2nd change: 40 working hours after the 1st change. Other changes must happen every 200 hundred working hours or 2 months (whichever occurs first).
	Excess of condensed water in the air receiver.	Drain the condensed water by using drain 90 .
Belt premature wearing or belt does not stay in pulley/flywheel groove.	Not aligned pulley/flywheel.	Align pulley/flywheel 26 , 27 , 28,29 , 30 , 31 , 32 and (21).
	Belt is not compatible with pulley/flywheel groove.	Replace the corresponding parts.
Unit transmits electric current (electric chock).	Installation not according to local technical standards.	Check the installation and make necessary adjustments.
Leaking safety valve.	Damaged valve.	Replace it 74 and 75 .
Compressor does not pump and does not charge, or charges in very low pressure.	Pilot valve is damaged or not regulated.	Regulate or replace valve.
	Tubing leakage between pilot and discharge valves.	Eliminate leakage.
	Discharge valve lock is open.	Adjust the valve or replace kit.

Note: Schulz S.A. reserves the right to change its products without prior notice.

- Other details of the air compressor consult the instruction manual Bravo, code 025.0403-0.
- Figures, photos and dimensions are only for orientation.

ATTENTION

- Use Schulz original parts only.
- Preserve the environment by not disposing of used pieces.
- The compressor addsembly of pump on tanks outside the factory default are not covered under warranty.
- (00) Number in parentheses and bold - Components of the compressor unit.

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