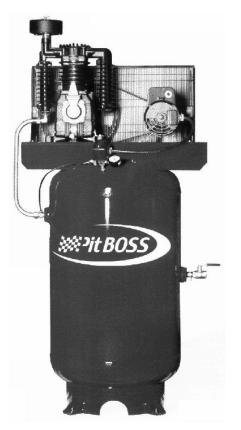




Models '56029-03', '58029-03', and '58039-03' Pit Boss Air Compressor Units

> Installation, Maintenance, And Service Data

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Please read this manual before installing or using your new **Pit Boss** Air Compressor Unit. It contains valuable information including a Unit and Pump breakdown, installation instructions, start-up procedures, and maintenance of the Unit.

Keep this booklet in a safe place for future reference.

If you require assistance, contact your local Distributor or Authorized Service Centre. If you wish to contact the manufacturer, Devair, directly or need to locate your closest Distributor, please reach us at :

Phone: (705) 728-5657 Fax: (705) 728-4974 Website: Email:

www.devair-compressors.com sales@devair.ca



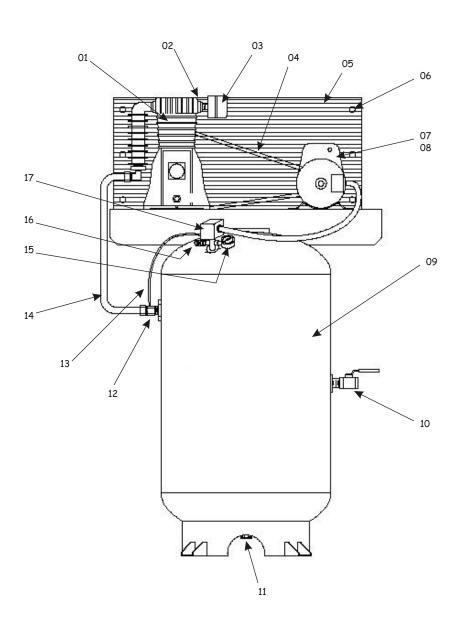
Safety Precautions

The following hazards may occur during the normal use of the equipment. Please read the following chart.

Area What to look for.	Hazard What may occur if precautions are not observed.	Safeguards How to avoid the hazard
	Tampering with the Unit while under full or partial pressure may cause an explosion.	Relieve all pressure from the Unit before attempting any repair or maintenance work.
	As the Unit starts and stops automatically , serious injury may result from working on the Compressor with the power still in the 'on' position.	Shut off all power to the Unit before attempting to repair or maintain the Compressor.
	As the Unit starts and stops automatically, do not come into contact with moving parts.	Shut off all power to the Unit before attempting to repair or maintain the Compressor.
	Air compressed by the Unit is not suitable for inhaling. It may contain poisonous vapours harmful to your health.	Never directly inhale compressed air produced by the Compressor.
	Compressor Pumps, Motors, and Tubing become hot when running. Touching these areas may cause severe burns.	Never touch the Pumps, Motors, or Tubing during or immediately after operation.
20FT 6.1m	As the electrical components on the Compressor are General Purpose and the Motor is Open Drip-Proof, there is a potential for explosion, should vapours be present in the area.	The Compressor must be a minimum of 20 Feet (6.1 Metres) from any source of potentially explosive vapours.



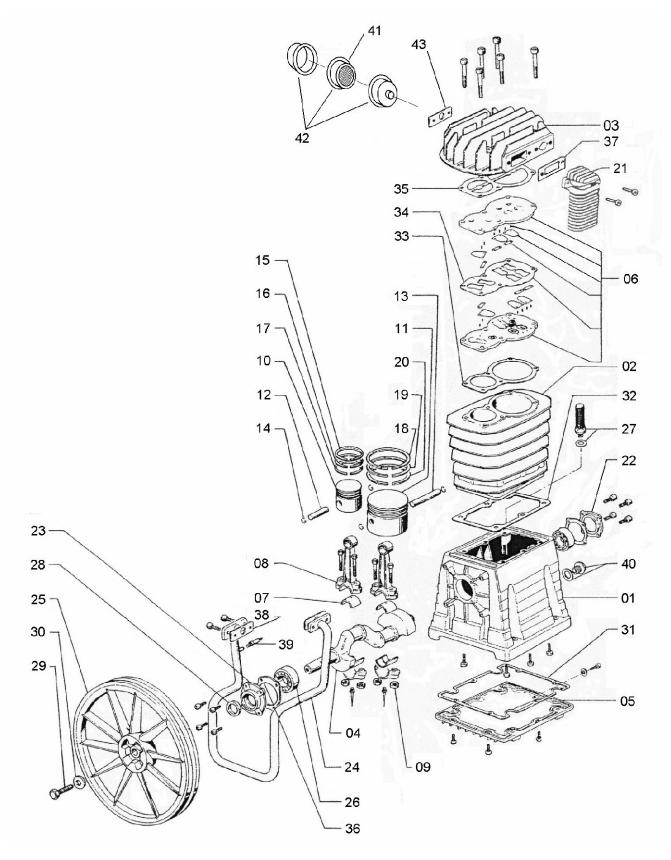
Compressor Unit Breakdown



	Unit	Model Nu	nber				Unit	Model Nu	mber		
Item:	56029-03	58029-03	58039-03	Qty	Description	Item:	56029-03	58029-03	58039-03	Qty	Description
01	DEV	-29	DEV-39	1	Pump Assembly	09	TA-9503			1	Tank - 60 Gallon Ve
02	EG-	9935	EG-9934	1	Belt Guard Bracket			TA-9	496-3	1	Tank - 80 Gallon Ve
03	357	-9703	357-9401	1	Intake Filter Assembly	10		VA-9705		1	Ball Valve
	357	-9704	357-9701	1	Filter Element	11		SS-2707		1	Drain Cock
04		BT-9033		1	Belt	12	CCV	-9401	CCV-9406	1	Check Valve
05		EG-9486		1	Belt Guard Assembly	13		CT-9732		1	Unloader Tube
06		EG-9932		1	Guard Clip	14	CT-	9730	CT-9731	1	Aftercooler Tube
07		MO-9042		1	Motor 5 HP	15		GA-250		1	Pressure Gauge
08	PU-9	9217	PU-9214	1	Motor Pulley	16		TIA-5200		1	Safety Valve - 200
						17	55	S-9004U115	5150	1	Pressure Switch









'DEV-29' Compressor Pump Breakdown

The Item Numbers in the Chart(s) below refer to the Pump Breakdown on Page 4.

Item	Part Number	Qty	Description
01	PB-1060	1	Crankcase
02	PB-1061	1	Cylinder
03	PB-1062	1	Cylinder Head
04	PB-1063	1	Crankshaft
05	PB-1064	1	Crankcase Bottom
06	PB-1065	1	Valve Assembly
07	PB-1066	2	Connecting Rod Insert
08	PB-1067	2	Connecting Rod
09	PB-1068	4	Connecting Rod Nut
10	PB-1069	1	High Pressure Piston
11	PB-1070	1	Low Pressure Piston
12	PB-1071	1	High Pressure Wrist Pin
13	PB-1072	1	Low Pressure Wrist Pin
14	PB-1073	4	Circlip
15	PB-1074	1	High Pressure Step Ring
16	PB-1075	1	High pressure Compress. Ring
17	PB-1076	1	High Pressure Oil Ring
18	PB-1077	1	Low Pressure Step Ring
19	PB-1078	1	Low Pressure Compress. Ring
20	PB-1079	1	Low Pressure Oil Ring
21	PB-1080	1	Aftercooler
22	PB-1081	1	Main Bearing Housing

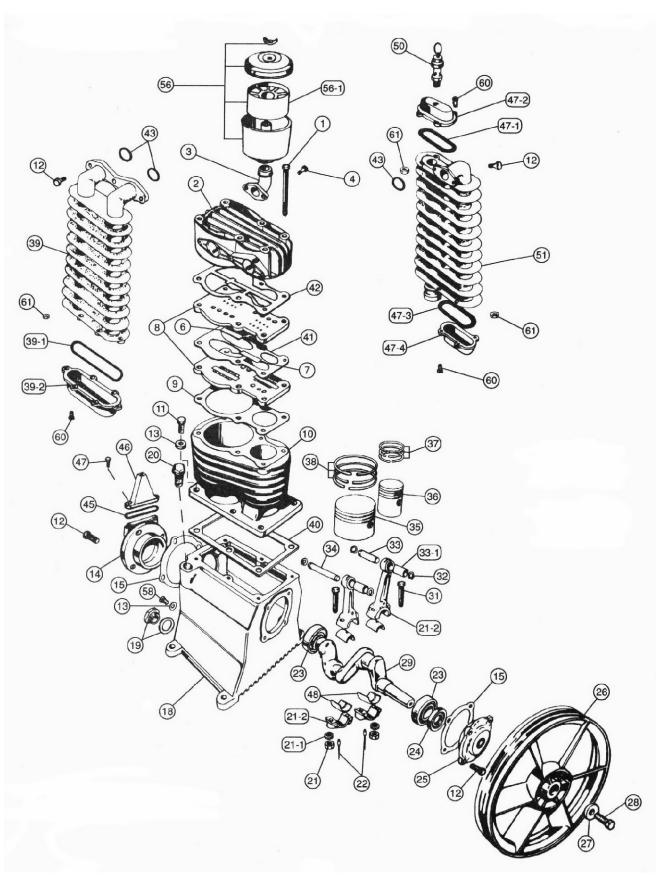
Item	Part Number	Qty	Description
23	PB-1082	1	Main Bearing Housing
24	PB-1083	1	Intercooler
25	PB-1084.1	1	Flywheel
26	PB-1085	2	Main Bearing
27	PB-1086	1	Oil Fill Plug
28	PB-1087	1	Oil Seal
29	PB-1088	1	Flywheel Bolt (LHT)
30	PB-1089	1	Flywheel Washer
31	PB-1090	1	Crankcase Bottom Gasket
32	PB-1091	1	Frame Gasket
33	PB-1092	1	Cylinder Gasket
34	PB-1093	1	Valve Plate Gasket
35	PB-1094	1	Head Gasket
36	PB-1095	2	Bearing Housing Gasket
37	PB-1096	1	Aftercooler Gasket
38	PB-1097	2	Intercooler Gasket
39	PB-1098	1	Safety Valve (65 psi)
40	PB-1099	1	Oil Sight Glass
41	357-9704	1	Filter Element
42	357-9703	1	Filter Assembly
43	PB-1080	1	Filter Adapter

Kits Available for the 'DEV-29' Pump

Part Number	Qty	Description	Includes
MK-29	1	Maintenance Kit	Oil + Filter (for 1 change)
VK-29	1	Valve Repair Kit	#6, 33, 35, 37, 38
GA-29	1	Gasket Kit	#31, 32, 33, 34, 35, 36, 37, 38
OK-29	1	Overhaul Kit	#6, 7, 15, 16, 17, 18, 19, 20, 28, 31, 32, 33, 35, 36, 37









'DEV-39' Compressor Pump Breakdown

The Item Numbers in the Chart(s) below refer to the Pump Breakdown on Page 6.

Item	Part Number	Qty	Description
1	PB-1000	6	Head Bolt
2	PB-1001	1	Cylinder Head
3	PB-1002	1	Inlet Filter Elbow
4	PB-1003	2	Bolt - Inlet Elbow to Head
6	PB-1004	2	Intake Valve - See 'VK-39'
7	PB-1005	2	Exhaust Valve - See 'VK-39'
8	PB-1006	2	Valve Plate
9	PB-1007	1	Cylinder Gasket
10	PB-1008	1	Cylinder
11	PB-1009	6	Cylinder Bolt
12	PB-1010	13	Bolt
13	PB-1011	6	Cylinder Bolt Washer
14	PB-1012	1	Main Bearing Housing
15	PB-1013	2	Bearing Housing Gasket
18	PB-1014	1	Crankcase
19	PB-1015	1	Oil Sight Glass
20	PB-1016	1	Oil Fill Plug
	PB-1017	1	Oil Fill Plug Gasket
21	PB-1018	4	Connecting Rod Nut
21-1	PB-1019	4	Connecting Rod Washer
21-2	PB-1020	2	Connecting Rod
22	PB-1021	2	Oil Splash Pin
23	PB-1022	2	Main Bearing
24	PB-1023	1	Oil Seal
25	PB-1024	1	Main Bearing Housing
26	PB-1025	1	Flywheel (0380)
27	PB-1026	1	Flywheel Washer
28	PB-1027	1	Flywheel Bolt
29	PB-1028	1	Crankshaft
31	PB-1029	4	Connecting Rod Bolt

Item	Part Number	Qty	Description
32	PB-1030	4	Wrist Pin Circlip
33	PB-1031	1	High Pressure Wrist Pin
33-1	PB-1032	2	Wrist Pin Bushing
34	PB-1033	1	Low Pressure Wrist Pin
35	PB-1034	1	Low Pressure Piston
36	PB-1035	1	High Pressure Piston
37	PB-1036	1	High Pressure Piston Ring Set
38	PB-1037	1	Low Pressure Piston Ring Set
39	PB-1038	1	Intercooler
39-1	PB-1039	1	Intercooler Cap Gasket
39-2	PB-1040	1	Intercooler Cap
40	PB-1041	1	Crankcase Gasket
41	PB-1042	1	Valve Plate Gasket - Copper
42	PB-1043	1	Head Gasket
43	PB-1044	3	Cooler 'O' Ring Gasket
45	PB-1045	1	Oil Breather Gasket
46	PB-1046	1	Oil Breather Assembly
47	PB-1047	2	Oil Breather Bolt
47-1	PB-1048	1	Aftercooler Top Cap Gasket
47-2	PB-1049	1	Aftercooler Top Cap
47-3	PB-1050	1	Aftercooler Bot. Cap Gasket
47-4	PB-1051	1	Aftercooler Bottom Cap
48	PB-1052	2	Connecting Rod Insert
50	TIA-5200	1	Safety Valve (200 psi)
51	PB-1054	1	Aftercooler
56	357-9401	1	Inlet Filter Assembly
56-1	357-9701	1	Filter Element
58	SS-9924	1	Drain Plug
60	PB-1058	14	Cooler Cap Bolt
61	PB-1059	14	Cooler Cap Nut

Kits Available for the 'DEV-39' Pump

Part Number	Qty	Description	Includes
MK-39	1	Maintenance Kit	Oil + Filter (for 1 change)
VK-39	1	Valve Repair Kit	#6, 7, 8, 9, 41, 42, 43
GA-39	1	Complete Gasket Kit	#9, 15, 40, 41, 42, 43
GK-39B	1	Bottom & End Gasket Kit	#15, 39-1, 40, 43, 47-1, 47-3
OK-39	1	Overhaul Kit	#15, 24, 33-1, 37, 38, 39-1, 40, 45, 47-1, 47-3, 48, VK-39



Installation - Mechanical

Location of the Unit

The Compressor Unit should be located in a dry, clean, cool, and well ventilated area. If possible, the Compressor should be located in a separate room or area, away from the general operations of the shop.

Allow room for easy access to the various components, as well as for maximum cooling effect caused by the Flywheel.

Ensure that the floor under the Unit is smooth and level. The Compressor must sit squarely on all four Feet. Place an Isolator Pad under each foot. For vertical units only, lag the Tank to the floor to prevent it from being knocked over.

Many common Compressor problems can be attributed to the location or installation of the Unit. Make sure the Unit is in a suitable location, and installed correctly. Should you be unsure, contact your local Distributor or Authorized Service Centre for advice.

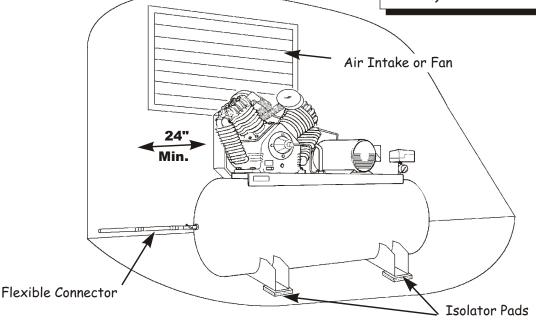
WARNING

In a horizontal unit never clamp or bolt air receiver Feet tightly to the floor or support structure. Doing so may greatly increase stress on the Tank, causing it to weaken and/or fracture.



The Compressor must not be operated in a confined area where the heat from the Unit cannot readily escape.

The drawing below shows the recommended components of a good installation. (A horizontal Unit is shown.)





Lubrication

The Crankcase oil level is to be maintained at the halfway level on the Sight Glass as installed on the front of the Pump. Do not under or overfill.

Use only Devair PREMIUM Compressor Oil for the Air Compressor, as it has been specially formulated for use with this product. Refer to the chart below for factory recommended Compressor Oils for various site conditions.

Devair Premium Compressor Oils	Room or Ambiant Temperature
PR-20 (20 Weight)	below 30 deg. F
PR-30 (30 Weight)	30 to 90 deg. F
40 Weight	above 90 deg. F



Please note that, under normal conditions, the Compressor Unit will operate intermittently.

The Unit starts/stops without warning.

Should it be necessary to service the Unit, ensure the power source has been shut down and locked off. This must be done to prevent personal injury, or damage to the unit.



Failure to connect the Compressor correctly to your building's electrical services may result in serious personal injury, or damage to equipment.



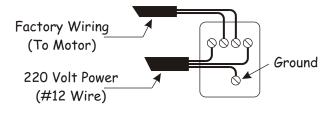
Do not attempt to operate the Unit without first checking whether there is Oil in the Pump. Add Oil as required. Serious damage may result from use, however limited, without Oil.



Use of improper Oil may negatively affect Compressor Pump performance or shorten Pump life. Resulting problems are not covered by the Devair Inc. Air Compressor Warranty.

Installation - Electrical

It is your responsibility to ensure that the Compressor Unit is electrically connected in a safe and correct manner. Any electrical work should be carried out by a competent Electrician familiar with Air Compressor Units, and be done is such a way that it meets all applicable Codes and Regulations.



Wiring at Pressure Switch



Start-Up Procedures

Do not attempt to operate the Unit without first checking whether there is Oil in the Pump. Add Oil as required. Serious damage may result from use, however limited, without Oil.

Initial Start-Up

1) Ensure that there is Oil in the Crankcase. Refer to the "Lubrication" section (page 9) in this manual for proper type and level of Oil.

2) Do a visual inspection of the Unit, and ensure that all Bolt heads are sufficiently tightened. This must be done, as some fasteners may become loose in transit.



The Motor will operate in only one direction. Correct rotation of the Pump, the most critical point for correct rotation, is clockwise while facing the Pump, Flywheel behind the Pump.

5) Open the Compressor's Ball Valve, and start the Unit. Ensure that the air is escaping to atmosphere. Allow the Unit to operate in this fashion for approximately 30 minutes. This lubricates the Pistons, Bearings, and all internal surfaces.

Do not place any materials on or against the Belt Guard, or the Compressor Unit as a whole. Placing materials there will limit the cooling of the Compressor, and could lead to premature failure.

6) After having run the Compressor Unit for 30 minutes, close the Ball Valve, and allow the unit to reach maximum operating pressure. Ensure that the Compressor shuts down at the pre-set maximum pressure, and the head pressure is released at the Pressure Switch.

7) Check the Compressor and Piping Systems for air leaks, and correct as required.

WARNING

Shut off all power to the Air Compressor Unit before attempting any repair or maintenance.

8) Stop the Compressor, and check the Oil level in the Crankcase. Add Oil as required.



During the first few days of operation, check the Unit periodically to ensure it is running smoothly and the controls are operating properly. Should you notice any areas of concern, contact your Distributor or Authorized Service Centre.



Preventative Maintenance

WARNING

When servicing the Air Compressor, shut off all power to the Unit, and drain the Tank of air pressure. Always replace the BeltGuard after adjusting the Belts or Pulleys.

To follow are general Maintenance guidelines based on an approximate Compressor usage of 40 hours per week. If your usage varies from this, adjust accordingly.

MAINTENANCE

DAILYDrain moisture from tank

WEEKLY

Check oil level and top up if necessary

QUARTERLY

- Change Oil & Filter Order Maintenance Kit
- Check condition and alignment of Belt, Flywheel and Motor Pulley
- Check Safety Valve
- Check Pressure Switch Unloader to ensure Compressor Head unloads whenever Motor shuts down
- Clean and/or blow off Pump Fins and Motor

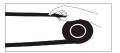
Please consult operating manual included with your Air Compressor for detailed maintenance information



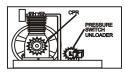


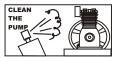
OIL

LEVE









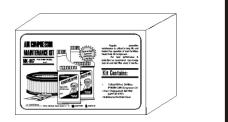
It is the responsibility of the compressor owner to ensure that a regular Maintenance Schedule is followed.

2000 Hour Maintenance

Though not noted on the "Maintenance" label (shown at left), the Compressor should have a more thorough Unit overhaul every 2000 hours. To follow are items that should be included in this procedure.

- Lubricate Motor Bearings.
- Inspect and replace as necessary the following:
 - Pump Valves
 - Check Valve(s)
 - Safety Valve(s)
 - Pressure Gauge
 - Belt(s)

Devair has Maintenance and Service Kits available for your Compressor Unit. Contact your local Devair Distributor or Service Centre for pricing and availability.





Warranty

The manufacturer warrants the product manufactured by it, when properly installed, operated, applied and maintained in accordance with procedures and recommendations outlined in the manufacturer's instruction manuals, to be free of defects in material and workmanship for a period of one (1) year from date of purchase at the retail level by the end user, not to exceed eighteen (18) months from the date of manufacture, provided such defect is discovered and brought to the manufacturers attention within the aforesaid warranty period.

The manufacturer will repair or replace any product or part determined to be defective by the manufacturer within the warranty period, provided such defect occurred in normal service and not as the result of misapplication, misuse, abuse, neglect, incorrect maintenance, accident, or normal wear. Normal maintenance items requiring routine replacement are not warranted.

The warranty covers parts and labour for the warranty period. Repair or replacement shall be made at the sole option of the manufacturer. Any service performed on the product by anyone other than the manufacturer must first be authorized by the manufacturer. Unauthorized service voids the warranty and any resulting charge or subsequent claim will not be paid.

Products repaired or replaced under warranty shall be warranted for the unexpired portion of the warranty applying to the original product, based on the original date of purchase and/or date of manufacture, as outlined above.

There is no other expressed warranty. Implied warranties including those of merchantability and fitness for a particular purpose are limited to one (1) year from date of purchase to the extent permitted by law and any and all implied warranties are excluded. This is the exclusive remedy. Liability for consequential damages under any and all warranties are excluded to the extent exclusion is permitted by law.

This warranty gives you specific legal rights, and you may also have other rights within your jurisdiction.

This warranty does not cover:

- 1. Merchandise that has become inoperative because of ordinary wear, misuse, negligence, accident, or improper and unauthorized repair or alteration.
- 2. Costs occasioned by the removal, replacement, or repair of merchandise (other than by Devair) without previous written authorization.
- 3. Expenses incurred in travel or lodging beyond a 100 kilometer (60 mile) distance from the nearest Devair Authorized Service Centre.
- 4. Expenses incurred in the return of equipment for inspection purposes to the manufacturers facility. All returns must be pre-authorized, and accompanied by a 'Return Authorization (RA) Number'
- 5. Products, parts, materials, components, or accessories manufactured by others or supplied in connection with the sale of the manufacturers products.
- 6. Repair and transportation costs of merchandise determined not to be defective under the terms and conditions of this warranty.
- 7. The cost of rental or loaner equipment while the customers original equipment is being assessed, repaired, or replaced.
- 8. Consequential damages in the event of product failure.

All decisions by Devair Inc. with regard to this policy shall be final. Devair will not be responsible for any claimed defective materials returned other than in accordance with this statement of policy or without our prior authorization.