

5 H.P. ELECTRIC STATIONARY SINGLE STAGE

165 TWIN CYLINDER PUMP

MODELS

165BP500 w/felt filter

500BP w/felt filter

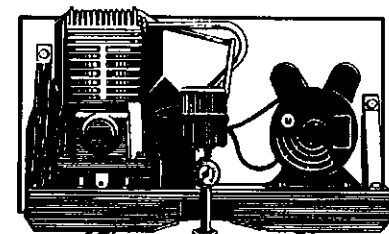
500B w/canister filter

500BPL2 w/felt filter includes power cord

500BPL w/felt filter

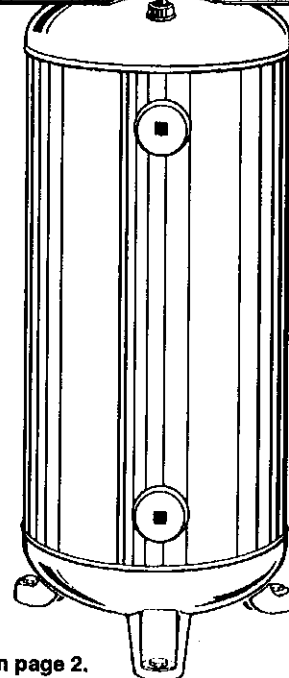
500BL w/canister filter *

500BPC w/felt filter includes power cord



Power cord
must be
purchased separately
unless otherwise
noted

1/4
turn valve
optional



See CAUTION on page 2.

SPECIFICATION CHART

MODEL NO.	H.P.	AIR RECEIVER TANK CAPACITY GALLONS	VOLTAGE/ AMPS/ PHASE	CFM @ 40 PSI	CFM @ 90 PSI	APPROX. KICK-IN PRESSURE	APPROX. KICK-OUT PRESSURE
165 SERIES	5	Vert. 44 & 60 ASME	230/15/1	12.7	10.6	90	120
		Horiz. 44 & 60 ASME					
500 SERIES		Vert. 44 & 60 ASME					
		Horiz. 44 & 60 ASME					

* CROSS-REFERENCE: AEP5044V = 500BL44V

In the event you should have a question, or a concern, with the air compressor, **DO NOT return** it to the store where you purchased it. Most problems and concerns can be taken care of on the telephone!

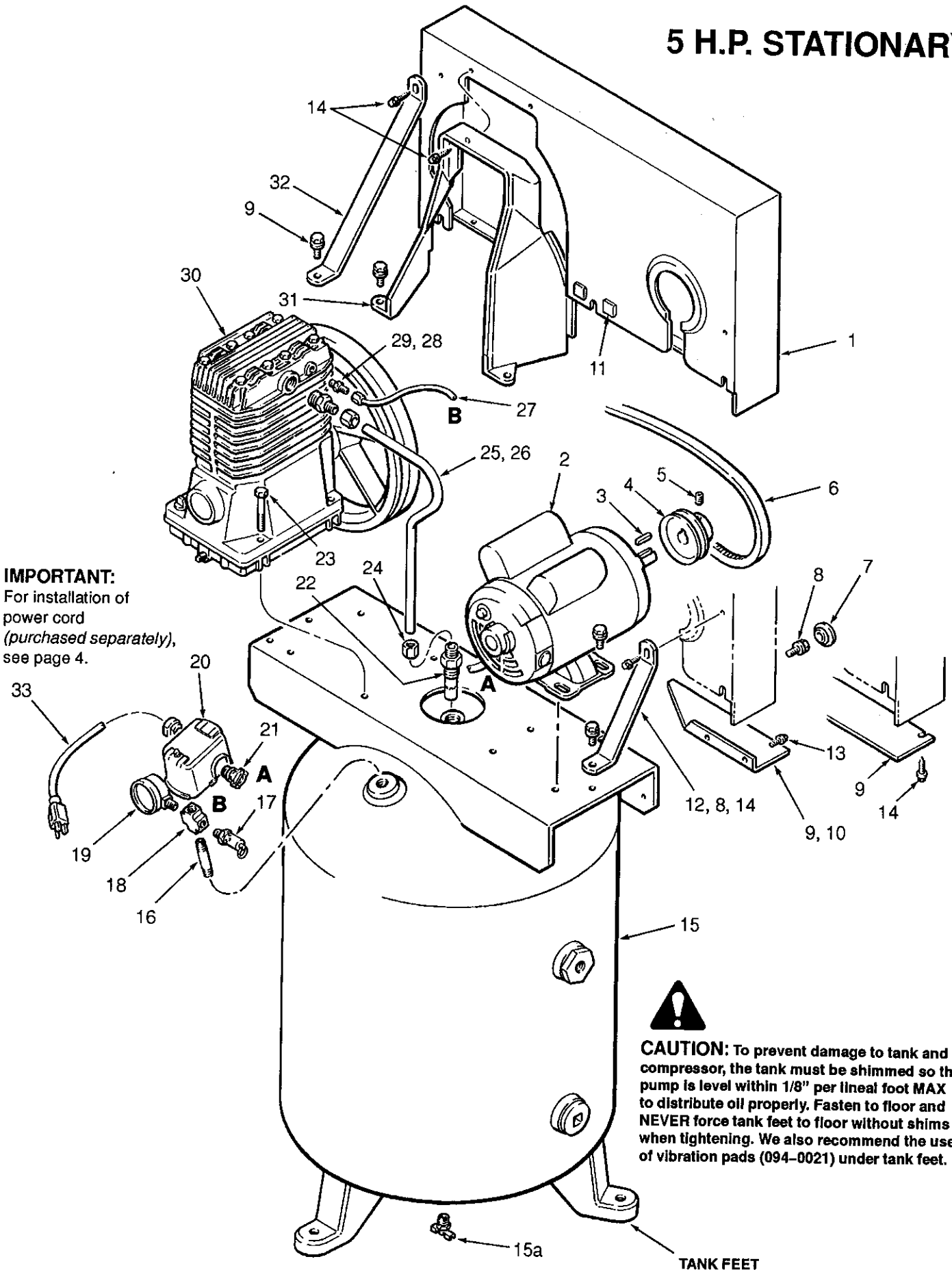
Simply call **(800) 544-5145 (Toll Free)** and discuss the concern with our trained Customer Service Department.

Should you not be able to reach us at the above number, please check the Service Center Listing included with your instruction manual and call the Service Center nearest you for assistance.

CAUTION: Read the operator's manual carefully before attempting to operate or service this unit! FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN: VOIDING OF YOUR WARRANTY, PERSONAL INJURY AND / OR PROPERTY DAMAGE! This Air Compressor is precision built from the finest materials and with proper care and maintenance will perform efficiently.

PARTS DRAWING

5 H.P. STATIONARY



IMPORTANT:
For installation of
power cord
(purchased separately),
see page 4.

CAUTION: To prevent damage to tank and compressor, the tank must be shimmed so the pump is level within 1/8" per lineal foot MAX to distribute oil properly. Fasten to floor and NEVER force tank feet to floor without shims when tightening. We also recommend the use of vibration pads (094-0021) under tank feet.

PARTS LIST

MODEL 165BP500 with felt filter
 44, 60 gal vertical or 44, 60 gal horizontal
 A.S.M.E tank includes items 1-32

MODEL 500BP with felt filter
 60 gal vertical A.S.M.E tank includes items 1-32

MODEL 500B with canister filter
 60 gal vertical A.S.M.E tank includes items 1-32

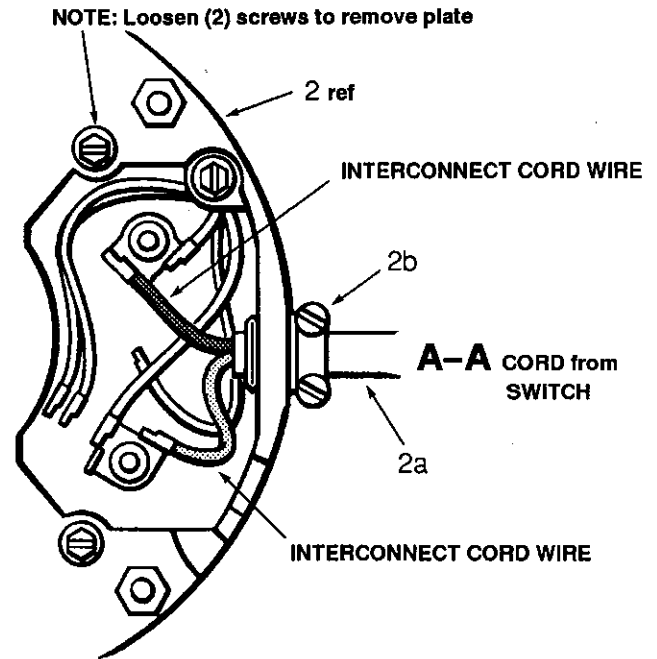
MODEL 500BPL2 with felt filter
 60 gal vertical A.S.M.E tank
 includes items 1-33, with item 33 in separate bag

MODEL 500BPL with felt filter
 44, 60 gal vertical or 60 gal horizontal
 A.S.M.E tank includes items 1-32

MODEL 500BL with canister filter
 60 gal vertical A.S.M.E tank includes items 1-32

MODEL 500BPC with felt filter
 44, 60 gal vertical or 60 gal horizontal
 A.S.M.E tank
 includes items 1-33 (item 33 assembled to switch)

MOTOR WIRING DETAIL



ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	142-0049	BELT GUARD	1	18	028-0005	CROSS	1
2	160-0160	MOTOR, 5 H.P., service <i>does not</i> include 2a or 2b See MOTOR WIRING DETAIL above	1	19	032-0025	GAUGE, 300 PSI	1
2a	026-0188	CORD, interconnect A-A	1	20	034-0088	SWITCH, pressure	1
2b	071-0002	STRAIN RELIEF	1	20a	136-0038	.VALVE, unloader, includes valve, nut, star washer & comp. nut	1
3	146-0016	KEY, 3/16 X 1"	1	21	071-0002	STRAIN RELIEF	2
4	006-0103	PULLEY, 3.75" dia	1	22	031-0035	CHECK VALVE	1
5	061-0006	SETSCREW, 5/16"-18 x 3/8" lg	1	23	059-0146	BOLT, 5/16" NC x 2 1/4"	4
6	008-0036	V-BELT,	1	24	058-0016	COMP. NUT & SLEEVE	2
7	093-0005	PLUG, button	3	25	145-0092	TUBE, transfer 1/2" (aluminum)	or
8	059-0012	.BOLT, lock 5/16"-18 x 1/2" lg	11		145-0191	TUBE, transfer 1/2" (copper)	or
9	125-0051	UNDERPAN, horizontal tank	or		145-0232	TUBE, transfer 1/2" (with fins)	1
	125-0100	UNDERPAN, vertical tank right side (shown)	1	26	068-0009	CONNECTOR, male 1/2" NPT x 1/2" O.D. tube	1
10	125-0099	UNDERPAN, vertical tank left side (not shown)	1	27	145-0082	TUBE, bleeder 1/4" B-B (alum.)	or
11	094-0010	PAD, vibration	4		145-0215	TUBE, bleeder 1/4" B-B (copper)	1
12	114-0006	BRACKET, belt guard	1	28	058-0017	COMP. NUT & SLEEVE	2
13	061-0056	SCREW, #10 x 1/4" lg thd frm vertical tank 4 horizontal tank 0	4	29	068-0002	CONNECTOR, male 1/8" NPT x 1/4" O.D. tube	1
14	061-0055	SCREW, #10 1/2" lg sheet metal vertical tank 4 horizontal tank 8	8	30	040-0193	PUMP ASSEMBLY <i>less flywheel</i> Model 165 w/ felt filter	or
15	153-0034	TANK ASSY, 44 gal vert ASME	or		040-0197	PUMP ASSEMBLY <i>less flywheel</i> Model 165 w/ canister filter	1
	153-0035	TANK ASSY, 44 gal horiz ASME	or	31	142-0039	SHROUD	1
	153-0032	TANK ASSY, 60 gal vert ASME	or	32	114-0129	BRACKET, belt guard	1
	153-0033	TANK ASSY, 60 gal horiz ASME includes 15a	1	OPTIONS not shown (purchased separately)			
15a	072-0001	.PETCOCK, 1/4"	1	33	026-0187	CORD, power, 6 ft lg	1
16	065-0005	NIPPLE, 1/4"	1		094-0021	PAD, vibration, tank feet	3
17	136-0037	VALVE, pressure relief ASME	1		073-0007	VALVE, 1/4 turn 3/8" NPT	1
					065-0032	NIPPLE, 3/8" NPT	1

POWER CORD INSTALLATION

When Power Cord Is Wired Directly to Pressure Switch

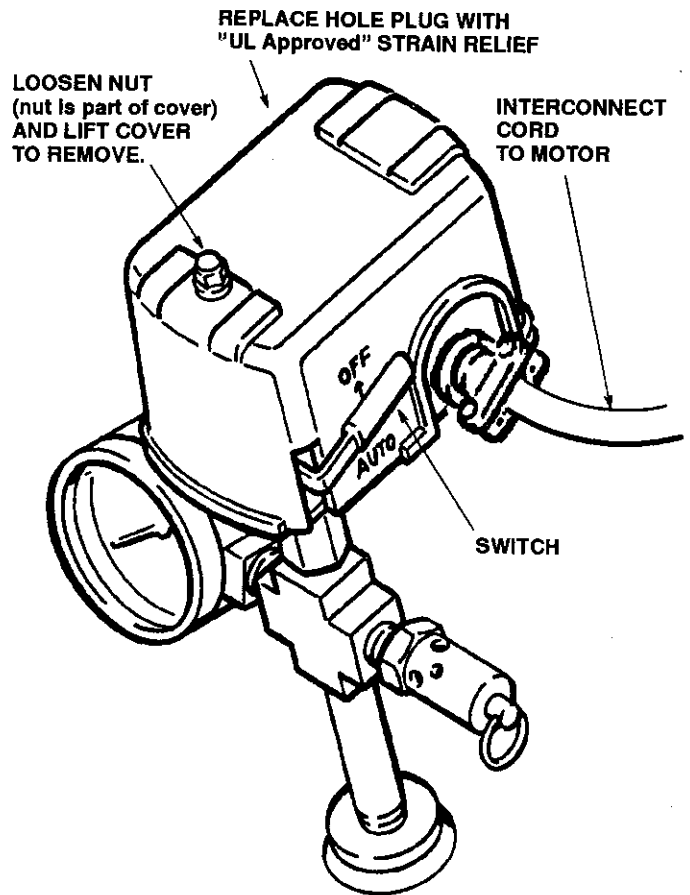
WARNING: The cord should be installed by a qualified electrician following all current **State and Local** codes.

IMPORTANT NOTE: The cord recommended is a 14/3 105°C ST with a 6 ft. minimum length. A "UL Approved" Strain Relief must be used on all units.

IMPORTANT NOTE: The outlet used *must* be a dedicated line for the air compressor only.

INSTALLATION:

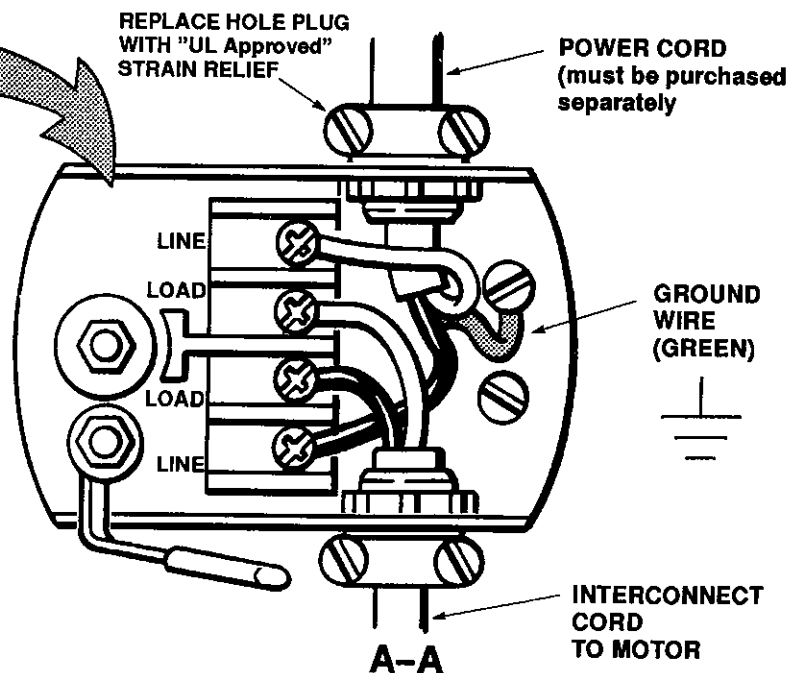
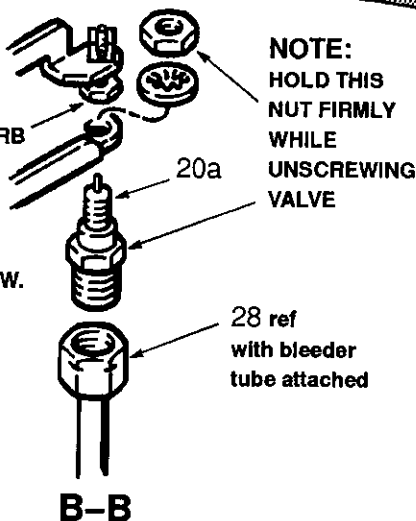
1. Move switch to the "OFF" position. See Figure at right.
2. Loosen the nut (nut is part of the cover) and lift the cover to remove. See Figure at right.
3. Remove the hole plug. See Figure below.
4. Install strain relief and attach wires to the proper connection. Tighten screws to 25-35 in.-lbs. See Figure below.
5. Replace cover and retighten nut.
6. Air compressor is ready to be plugged in and turned on if you have followed other "START UP" instructions according to your User Manual.



UNLOADER VALVE DETAIL

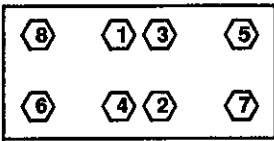
For PART NO's see pages 2 & 3

WARNING: NEVER DISTURB OR TAMPER WITH THE ADJUSTMENT OF THIS SCREW.



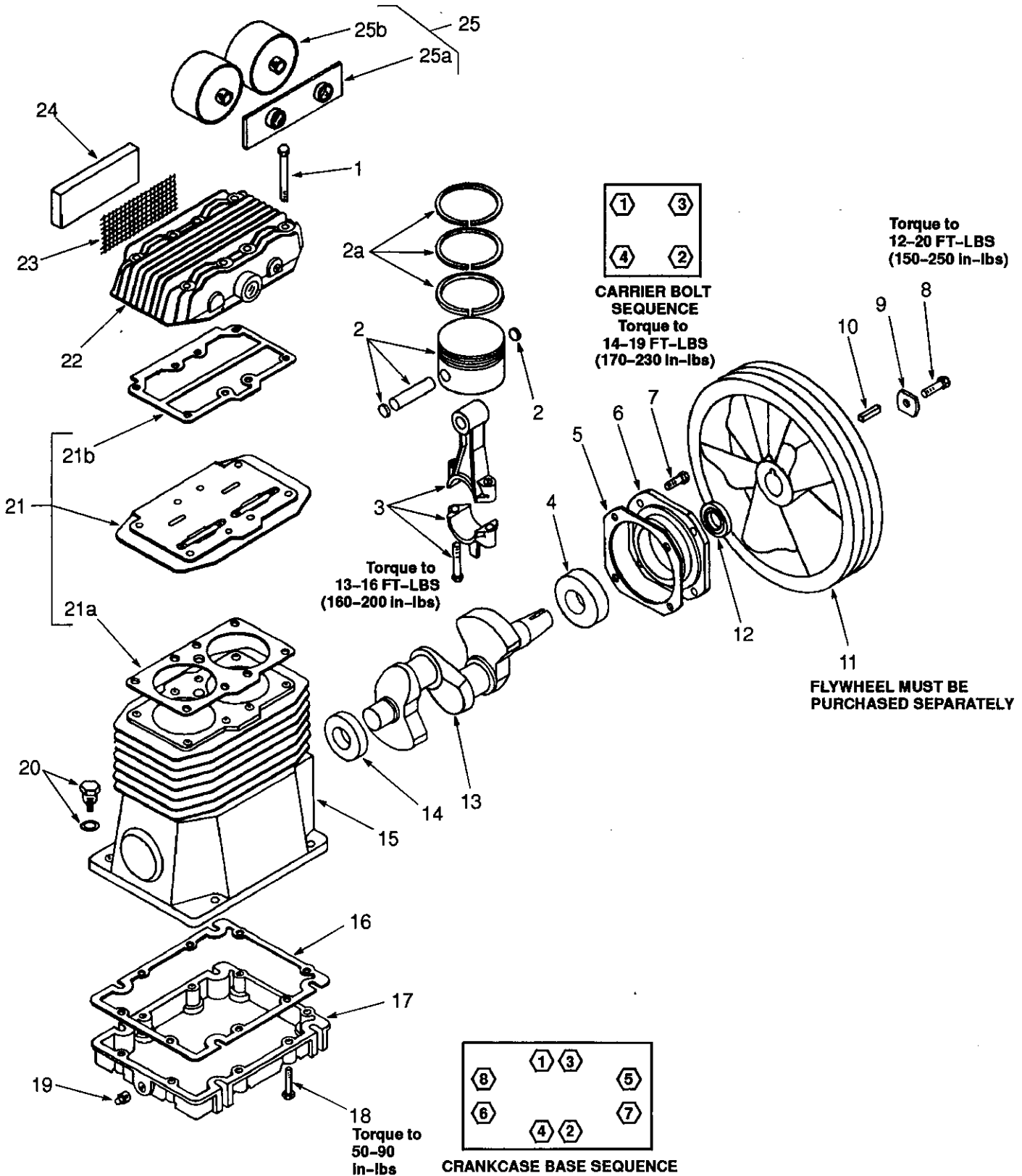
PARTS DRAWING and LIST

HEAD BOLT SEQUENCE



SEQUENCE #'s
1, 2, 3 & 4
Torque to
20-26 FT-LBS
(240-320 in-lbs)

SEQUENCE #'s
5, 6, 7 & 8
Torque to
16-23 FT-LBS
(200-280 in-lbs)



PARTS DRAWING and LIST

165 PUMP 040-0193 less flywheel with felt filter includes items 1-10, 12-24

165 PUMP 040-0197 less flywheel with canister filter includes items 1-10, 12-22 & 25

FLYWHEEL 040-0040

ITEM 11 (must be purchased separately)

ITEM	PART NO	DESCRIPTION	QTY
1	059-0151	SCREW, stud 5/16" x 3.5" lg	1
	and		
	059-0144	SCREW, 5/16" x 2.5" lg	7
2	048-0065	PISTON ASSEMBLY includes piston w/wrist pin & 2 ret. caps and item 2a	2
2a	054-0112	RING SET, includes taper face, scraper groove and an oil ring group	1
3	047-0070	ROD, connecting	2
4	051-0043	BEARING, open	1
5	046-0149	GASKET, bearing carrier	1
6	045-0047	CARRIER, bearing	1
7	059-0143	SCREW, 5/16" x 7/8" lg	4
8	059-0002	SCREW, 5/16" x 1" lg	1
9	060-0053	WASHER, flywheel	1
10	146-0016	KEY, 3/16" sq x 1" lg	1
11	044-0040	FLYWHEEL, 12" O.D. B-width <i>must be purchased separately</i>	1
12	046-0161	SEAL, oil	1

ITEM	PART NO	DESCRIPTION	QTY
13	053-0043	CRANKSHAFT	1
14	051-0013	BEARING	1
15	049-0035	CRANKCASE	1
16	046-0150	GASKET, crankcase base	1
17	077-0065	BASE, crankcase	1
18	059-0145	SCREW, 1/4" x 1 1/4" lg	8
19	062-0002	PLUG, 1/8" NPT	1
20	056-0019	DIPSTICK w/o-ring	1
21	043-0143	PLATE, valve assembly includes items 21a & 21b	1
21a	046-0152	.GASKET, cylinder	1
21b	046-0151	.GASKET, head	1
22	042-0068	HEAD	1
23	118-0023	SCREEN, felt filtered models	1
24	019-0052	FILTER, inlet, felt filtered models	1
25	019-0090	CANISTER FILTER ASSEMBLY includes items 25a & 25b	1
25a	019-0096	.PLATE, filter	1
25b	019-0049	.CANISTER, filter, each includes 1 of item 25b1	2
25b1	019-0053	.ELEMENT, filter	1

AVAILABLE SERVICE KITS

PART NO	DESCRIPTION
046-0159	GASKETS, complete set
165-0083	OVERHAUL KIT, felt filter model includes ring and gasket sets, valve plate assembly and filter element
165-0055	OVERHAUL KIT, canister filter model includes ring and gasket sets, valve plate assembly and filter elements

ITEM 2a - RING SET 054-0112

IMPORTANT: Rings must be assembled with colored stripes in the position designated below and in the following numerical sequence:

