



## INSTALLATION, OPERATING INSTRUCTION MANUAL AND PARTS LIST FOR MODEL CT-55 & CT-75

### WARNING

Before installing and operating this compressor, read and understand the safety precautions contained in LV-474 supplement to CAP-403.

#### IMPORTANT

Make a permanent record of the Model and Serial number of your machine here. You will save time and expense by including this reference identification on replacement part orders.

#### CT SERIES

REFER TO MODEL & SERIAL NUMBER.  
READ INSTAL. & OPERATION INSTR.  
DO NOT OPERATE LOWER THAN 800  
R.P.M. OR ABOVE MAX. AS STIPULATED  
BY PERFORMANCE DATA SHEET.

MODEL NO.

SERIAL NO.

CURTIS AIR COMPRESSOR-1905 KIENLEN AVE.  
ST. LOUIS, MO. 63133, USA.

QAB-626



### WARNING

PERSONAL INJURY AND/OR EQUIPMENT DAMAGE WILL RESULT FROM FAILURE TO PAY ATTENTION TO THE VITAL SAFETY INFORMATION AND INSTRUCTIONS IN THIS MANUAL. CAREFULLY READ, UNDERSTAND AND RETAIN ALL SAFETY INFORMATION AND INSTRUCTIONS BEFORE OPERATING THIS COMPRESSOR.

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## INSTALLATION

**CONGRATULATIONS** on your new **CT Series** Compressor. Please examine the compressor for shipping damage(s) and if any are found report it immediately to the carrier.

Select a clean dry location with a rigid floor strong enough to support the compressor. If the compressor is to be located in an area where vibration is critical, properly engineered vibration mounts and flexible piping should be used. Remove the skid. **NOTE: The compressor should never be operated on the shipping skid.** Level the compressor so it can be bolted down securely. Before tightening the bolts, check to see that all four feet are resting on the foundation. Shim as necessary to eliminate stress on the receiver or base when the bolts are tightened. We suggest using a level for proper alignment.

Maximum ambient temperature in which the compressor and motor should be operated is 104°F. Therefore, adequate ventilation must be provided.

The suction openings of the compressor are equipped with a combination air filter-muffler to protect the compressor from normal dust and other harmful substances. If the air around the compressor is excessively hot, dusty, humid or contaminated with foreign gases (such as ammonia or acid fumes) move the filter-muffler to a remote point where the air is clean, cool and dry. Run a pipe to the compressor suction opening. If the run is over 50 feet in length, use a larger pipe to avoid excessive pressure drop. In order to fit the filter to the compressor, bush down the connections. Be sure piping and fittings are clean and free from dirt and chips. If the filter is installed outside, check to insure that it is located above the normal outside dust level, and the filter element is protected against rain or ice.

## ELECTRICAL REQUIREMENTS

The electrical installation of this unit is required to be performed by a qualified electrician and must be in accordance with the latest edition of the National Electrical Code (N.E.C.), NFPA 70, O.S.H.A. Code including all local and state codes. Failure to comply by the national, state and local codes may result in physical harm and/or property damage. Do not under any circumstances by-pass any motor over current protection devices. **NOTE: This unit must be grounded.**

**Before installation, the electrical supply must be checked for adequate wire size and transformer capacity. Failure to install branch circuit protection with proper motor starters and overloads will void the motor manufacturers warranty. NOTE: Do not close the disconnect switch to start the compressor until the procedures outlined under "Startup Procedures" have been completed.**

## DANGER!

High voltage may cause personal injury or death, per O.S.H.A. regulations 1910.137, disconnect and lockout/tagout all electrical power supplies before opening the electrical enclosure or servicing.

## WARNING!

Never assume a compressor is safe to work on just because it is not operating. It could restart at any time. Follow all safety precautions as outlined in this manual.

All NEMA electrical enclosures and components must be in accordance with the surrounding environment of the installation.

**LIMITED SAFETY PRECAUTIONS**

(Also see supplement LV-474)

The following safety precautions are recommended in the use of this compressor:

1. Furnished with a totally enclosed OSHA-approved belt guard to cover the drive assembly. Where possible, place the flywheel toward the wall, and mount the unit a minimum distance of 2 feet from the wall for maintenance convenience.
2. Turn off & lock out the electrical disconnect switch before working on the unit to prevent the unit from starting unexpectedly
3. Release all air pressure from the system before working on the unit and red tag all electrical control switches, for safety precaution.
4. Do not by-pass motor over-current protection.
5. Do not change the setting or in any way affect the operation of the safety valve.
6. Keep unit securely anchored so that movement will not put a strain on piping, wiring, or air receiver. **(DO NOT USE plastic pipe, rubber hose, or lead-tin soldered joints in any part of the compressed air system.)**

**WARNING: Read and understand supplement LV-474 before installing and operating the compressor.**

## START-UP PROCEDURES

### OIL RECOMMENDATION

Use Genuine **CURTISLUBEPLUS** Lubricants. Specially formulated for Curtis Reciprocating Air Compressors. Non-Detergent type with anti-foam, anti-rust and oxidation inhibitors.

Recommended **ISO68 RC-1000** Premium Reciprocating Compressor Lubricant, **Part no. VO411-3**, 12-quart case or VO411-2, 4 gallon case.

Recommended **ISO100 RC-1000A** Premium Reciprocating Compressor Lubricant **Part no. VO421-3**, 12-quart case or VO421-2, 4 gallon case.

**CURTISLUBEPLUS** Lubricants are available through your authorized Curtis distributor.

If the compressor is equipped with an automatic start-stop control (with pressure switch unloading), it is automatically unloaded upon starting, and will automatically load after attaining running speed. Close the disconnect switch and start the compressor. Observe the direction of rotation, which should be counterclockwise when viewed from the flywheel side of the compressor on all models. For single-phase units, the direction of rotation is determined by the motor nameplate instructions, and is adjusted at the factory. For three-phase units, if the rotation is incorrect, stop the unit and interchange any two of the three wires to the motor at the disconnect switch. This will reverse the direction of rotation of the motor and compressor.

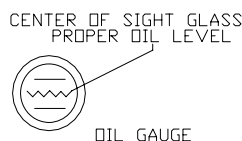
### PREVENTIVE MAINTENANCE

A good maintenance program will add years of service to your air compressor. The following is recommended as a minimum maintenance program.

**(DO NOT OPERATE WITHOUT BELT GUARD)**

#### LUBRICATION

1. For proper lubrication the compressor shall not be operated below the minimum or above the maximum R. P.M. recommended for the various models.
2. Maintain oil level mid-way between the upper and lower lines of the crankcase sight gage. **NOTE ILLUSTRATION:**



3. Stop compressor to add and gauge oil.
4. Do not fill above the upper line and do not operate compressor with oil level below the lower line.

#### **DO NOT OVER FILL**

5. Change oil at the first 100 hours of operation and 1000 hours thereafter, or as required. It may be necessary to change oil more frequent due to abnormal humid and contaminated conditions.

#### DAILY MAINTENANCE SCHEDULE

1. Check and maintain oil level at centerline of sight glass and add oil as necessary.
2. Drain condensate from receiver unless it is equipped with an automatic tank drain, in which case the drain should be checked weekly to see that it is operating. See automatic tank drain instructions.
3. Check for unusual noise or vibration (See "Trouble Shooting".)

**WARNING: Read and understand supplement LV-474 before installing and operating the compressor.**

### **TURN OFF POWER BEFORE SERVICING!!!**

#### WEEKLY

1. Clean the air filters. A clogged air filter can seriously affect the efficiency of the compressor and cause overheating and oil usage.
2. Clean all external parts of the compressor and driver. Be sure to clean the intercooler-finned surface on two-stage compressors. A dirty compressor will cause abnormally high discharge temperature and resulting oil carbonization on internal valve components
3. Check the safety valve manually (by pulling ring or lever) to see that it is not stuck.

#### INITIAL – 100 HOURS OR 30 DAYS

1. Change oil.
2. Check drive belt tension and tighten if needed.

#### MONTHLY

1. Inspect the entire air system for leaks.
2. Inspect condition of oil and change if necessary.
3. Check drive belt tension and tighten if needed.

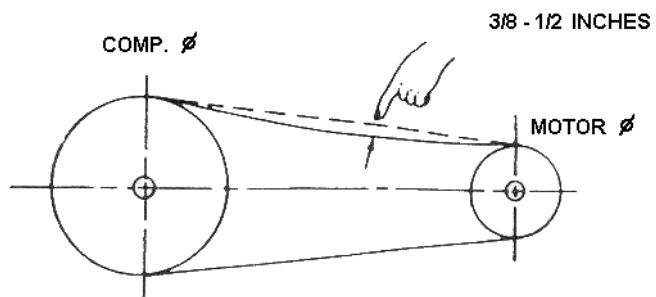
#### EVERY 3 MONTHS OR 1,000 HOURS OF OPERATION.

1. Change oil.
2. Inspect valves. Clean the carbon from valves and head if necessary.
3. Check and tighten if necessary all bolts, nuts, etc.
4. Check unloader operation.

#### **\*CHECKING BELT TENSION**

The v-belt(s) should be adjusted so that a declination of about 3/8 – 1/2 inch will be obtained when it is pushed by a finger at the middle point as shown in Figure 1.

**CAUTION: Over tightening the v-belt(s) will result in overloading of the motor and belt failure, while a loose belt will be slipping and resulting in an unstable speed, overheating the belt and high amp draw.**



To change tension, loosen the motor hold-down bolts and slide the motor on the base, using a lever if necessary, or by turning the adjusting bolt at the end of the base.

Retighten motor hold-down bolts.

**NOTE: Do not over tighten belts.**

**ELECTRIC MOTOR**

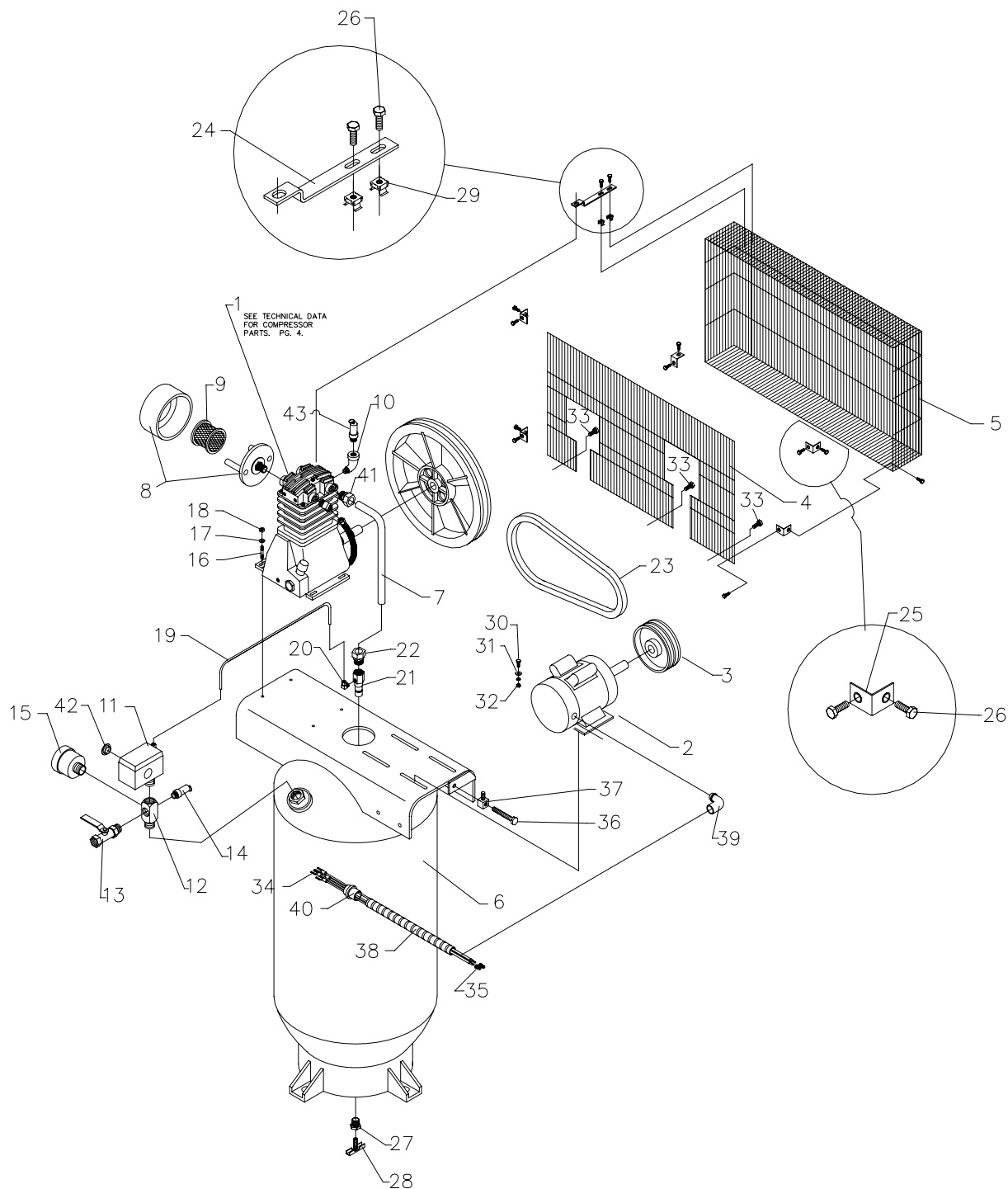
Grease once a year with a good grade of lithium ball bearing grease, or as directed by the motor manufacturer

**REBUILD KITS**

<b>Model CT-55 – Replacement Parts (CCC1791)</b>			<b>Model CT-75 – Replacement Parts (CCC1792)</b>		
<b>Model</b>	<b>Part Numbers</b>	<b>Description</b>	<b>Model</b>	<b>Part Numbers</b>	<b>Description</b>
CT-55	CCC1793	Gasket Kit	CT-75	CCC1794	Gasket Kit
CT-55	CCC1795	Valve Plate Kit	CT-75	CCC1796	Valve Plate Kit
CT-55	CCC1797	L P Ring Kit	CT-75	CCC1799	L P Ring Kit
CT-55	CCC1798	H P Ring Kit	CT-75	CCC1800	H P Ring Kit
CT-55	701208A1-57080	Shaft Seal	CT-75	9340181-50350	Shaft Seal
CT-55	70A109B1-57702	Oil Sight Glass	CT-75	70A109B1-57702	Oil Sight Glass
CT-55	701208A1-57191A	Oil Fill Plug	CT-75	701208A1-57191A	Oil Fill Plug
CT-55	70131BA1-57670	Breather Tube	CT-75	70131BA1-57670	Breather Tube
CT-55	70A109B1-87100	Intercooler	CT-75	40A612B1-87100	Intercooler
CT-55	VA1163	Intake Filter Elem.	CT-75	VA1165	Intake Filter Elem.
CT-55	VA1166	Intake Filter Assy.	CT-75	VA1164	Intake Filter Assy.

<b>When replacing 40CT pump, Use kit # CCC1801</b>	<b>When replacing 60CT pump, Use kit # CCC1802</b>
Pump CT 55	Pump CT 75
Discharge tube	Discharge tube
Fittings	Fittings
Pulley	Pulley
Belts	Belts
Top bracket	Top bracket
Stud, Mounting	Stud, Mounting
<b>When replacing 60CT pump, Model 1060HT12 Use kit # CCC1805</b>	<b>When replacing 60CT pump, Model 760HT12 Use kit # CCC1806</b>
Pump CT 55	Pump CT 75
Discharge tube	Discharge tube
Fittings	Fittings
Pulley	Pulley
Belts	Belts
Top bracket	Top bracket
Stud, Mounting	Stud, Mounting
<b>When replacing 60CT pump used with Honda engine, use kit # CCC1803</b>	<b>When replacing 60CT pump used with Kohler engine, use kit # CCC1804</b>
Pump CT 75	Pump CT 75
Discharge tube	Discharge tube
Fittings	Fittings
Pulley	Pulley
Belts	Belts
Top bracket	Top bracket
Stud, Mounting	Stud, Mounting

**EXPLODED VIEW, VERTICAL, 5HP, 60 GALLON- MODEL 555VT6**



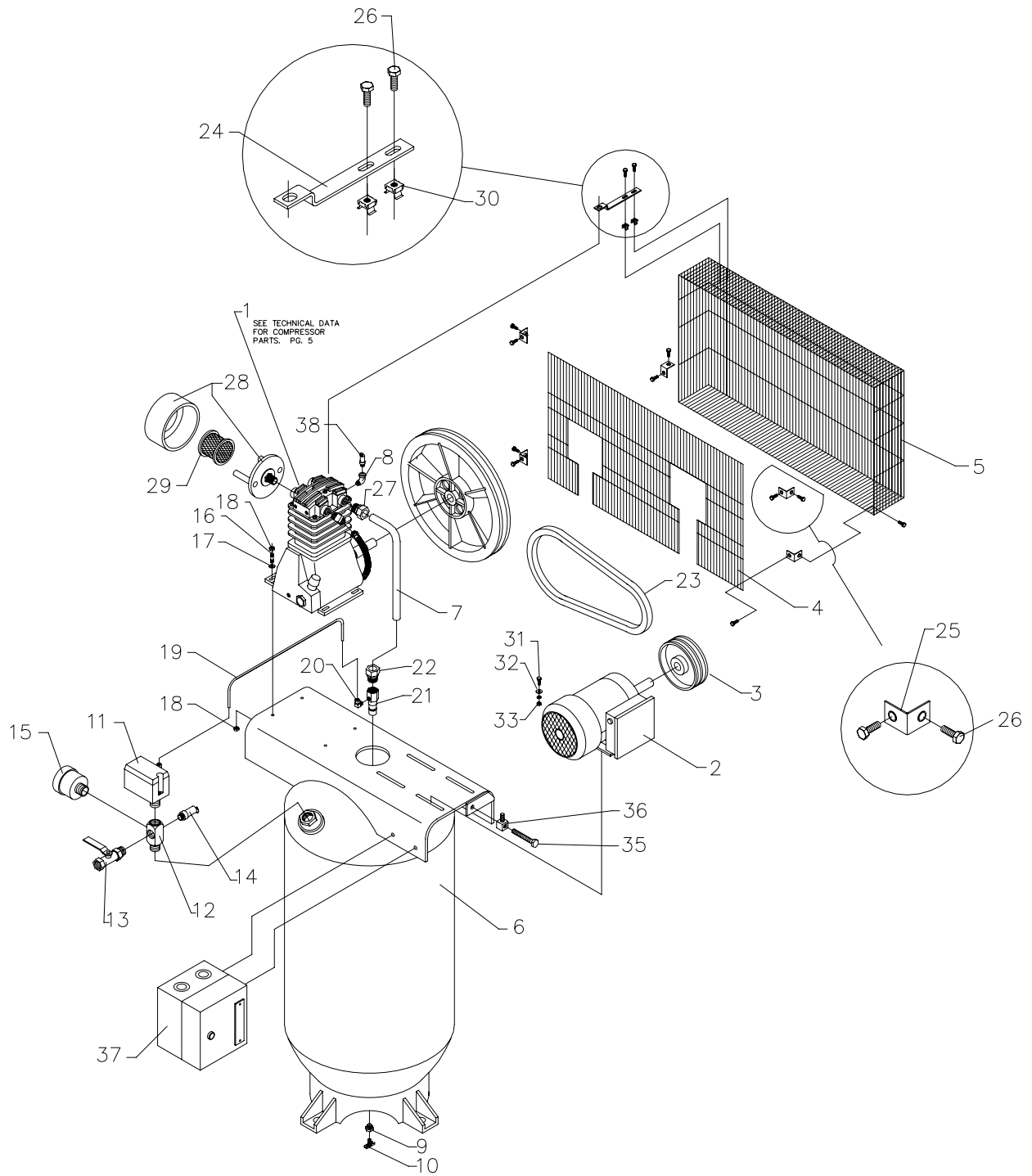


**PARTS LIST, VERTICAL**

ITEM NO.	DESCRIPTION	QTY	555VT6-A2* 5 HP	555VT8-A21* 5 HP
1	COMPRESSOR CT 55	1	CCC1791	<
2	MOTOR	1	VM959	VM959
3	PULLEY	1	VDA203	<
4	INNER SCREEN (BELT GUARD)	1	CAF2487	<
5	OUTER BELT GUARD	1	CAF2486	<
6	VERTICAL TANK	1	OQA217	OQA216
7	DISCHARGE PIPE CT 55	1	OFF911A	<
8	FILTER, INTAKE ASSEMBLY	1	VA1166	<
9	FILTER, INTAKE ELEMENT	1	VA1163	<
10	STREET ELBOW 90° BRASS	1	VA08AE	<
11	PRESSURE SWITCH	1	VSA361	<
12	PRESSURE SWITCH, TREE	1	CCC1677	<
13	DRAIN COCK	1	VV552	<
14	SAFETY VALVE	1	VV404	<
15	PRESSURE GAUGE, AIR	1	VA334	<
16	STUD MTG	4	CCC1814	<
17	WASHER, RUBBER	4	VH1320	<
18	NUT	4	VH1536	<
19	TUBING, ¼"	1	OFF908	OFF908
20	ELBOW, 90°	1	VA15ACE	<
21	CHECK VALVE	1	VV809	<
22	COMPRESSION CONNECTOR	1	VA14EHE	<
23	V-BELT	1	VD310	<
24	BRACKET BELTGUARD TOP	1	CAF2526	<
25	BELT GUARD CLIPS	5	CAF2488	<
26	HHCS ¼-20 X ½LG	12	VH51FE1	<
27	BUSHING, REDUCING 2" X ¼" NPT	1	VA12JBQ	<
28	DRAIN COCK	1	VV514	<
29	NUTS, WIRE BELT GUARD	2	VH515	<
30	BOLT, 3/8-1"LG	3	VH10HH	<
31	WASHER, RUBBER	4	VH1320	<
32	NUT	4	VH1536	<
33	HHCS 5/16-18UNC X 1, (MOUNTING BELTGUARD TO FRAME )	3	VH1108	<
34	WIRE TERMINAL RING TONGUE	4	VE794	<
35	WIRE NUTS	2	VE741	<
36	MOTOR BOLT	1	OFA299	<
37	TAKE-UP, MOTOR BOLT	1	OFC256	<
38	CORD ASSEMBLY	1	CCC1682	<
39	CONNECTOR, 90°	1	VE795	<
40	CONNECTOR, STRAIGHT	1	8290	<
41	COMPRESSION FITTING (not shown)	1	VA14DHE	<
42	KNOCKOUT PLUG	1	VE665	<
43	HP 1/8" ASME SAFETY VALVE	2	CCC1718	<

\* A21 = 1/60/230

**EXPLODED VIEW, VERTICAL, 5HP, 80 GALLON – MODEL 555VT8**



**PARTS LIST, VERTICAL**

ITEM NO.	DESCRIPTION	QTY	555VT8-A2* 5 HP	555VT8-A9* 5 HP	555VT8-A3* 5 HP	555VT8-A4* 5 HP	555VT8-A8* 5 HP
1	COMPRESSOR CT 55	1	CCC1791	<	<	<	<
2	MOTOR	1	VM957	VM960	VM908	VM908	VM961
3	PULLEY	1	VDB334	<	<	<	<
4	INNER SCREEN (BELT GUARD)	1	CAF2487	<	<	<	<
5	OUTER BELT GUARD	1	CAF2486	<	<	<	<
6	VERTICAL TANK	1	OQA218	<	<	<	<
7	DISCHARGE PIPE CT 55	1	OFF911A	<	<	<	<
9	BUSHING, 2" X 1/4"	1	VA12JBQ	<	<	<	<
10	COCK, DRAIN	1	VV514	<	<	<	<
11	PRESSURE SWITCH	1	VSA362	<	<	<	<
12	PRESSURE SWITCH, TREE	1	CCC1677	<	<	<	<
13	DRAIN COCK	1	VV552	<	<	<	<
14	SAFETY VALVE	1	VV404	<	<	<	<
15	PRESSURE GAUGE, AIR	1	VA334	<	<	<	<
16	STUD, MOUNTING	4	CC1814	<	<	<	<
17	WASHER, RUBBER	4	VH1320	<	<	<	<
18	NUT, 5/16-18	4	VH1536	<	<	<	<
19	TUBING, 1/4"	1	OFF909	<	<	<	<
20	ELBOW, 90°	1	VA15ACE	<	<	<	<
21	CHECK VALVE	1	VV809	<	<	<	<
22	COMPRESSION CONNECTOR	1	VA14EHE	<	<	<	<
23	V-BELT	1	VD323	<	<	<	<
24	BRACKET BELTGUARD TOP	1	CAF2526	<	<	<	<
25	BELT GUARD CLIPS	5	CAF2488	<	<	<	<
26	HHCS 1/4-20 X 1/2LG	12	VH51FE1	<	<	<	<
27	FITTING, COMPR, 1/2 X 3/4	1	VA14DHE	<	<	<	<
28	FILTER, INTAKE ASSEMBLY	1	VA1166	<	<	<	<
29	FILTER, INTAKE ELEMENT	1	VA1163	<	<	<	<
30	NUTS, WIRE BELT GUARD	2	VH515	<	<	<	<
31	BOLT, CARRIAGE	3	VH10KH	<	<	<	<
32	WASHER, RUBBER	4	VH1321	<	<	<	<
33	NUT	4	VH1537	<	<	<	<
34	HHCS 5/16-18UNC X 1, MOUNTING BELTGUARD TO FRAME (NOT SHOWN)	3	VH1108	<	<	<	<
35	MOTOR BOLT	1	OFA299	<	<	<	<
36	TAKE-UP, MOTOR BOLT	1	OFC256	<	<	<	<
37	STARTER KIT, (OPTIONAL)	1	CY60N	CY60P	CY60M	CY60L	CY60Q
38	HP 1/8" ASME SAFETY VALVE	2	CCC1718	<	<	<	<

\* A2 = 1/60/230

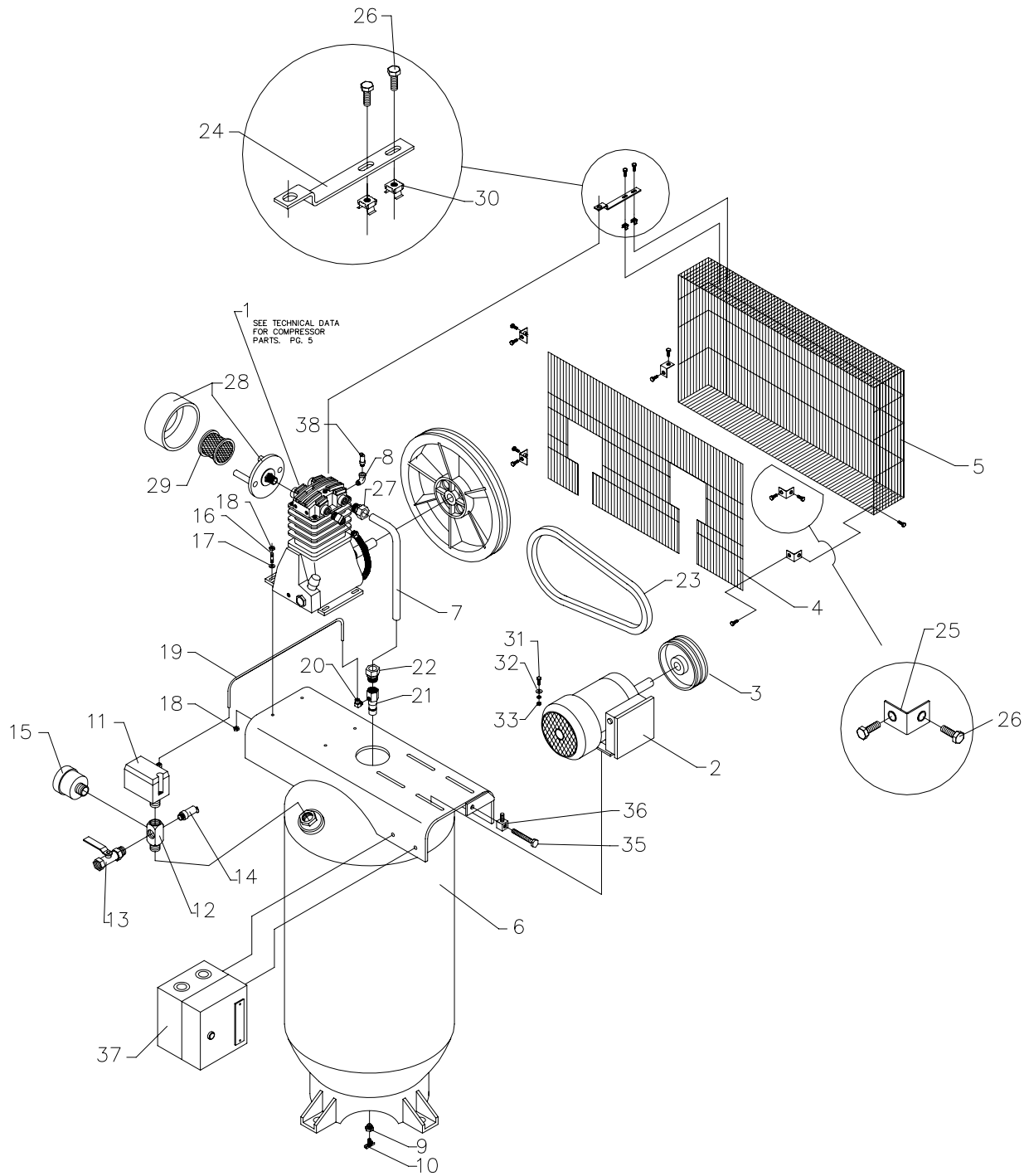
\* A9 = 3/60/200

\* A3 = 3/60/230

\* A4 = 3/60/460

\* A8 = 3/60/575

**EXPLODED VIEW, VERTICAL, 7 1/2HP, 80 GALLON – MODEL 755VT8**



**PARTS LIST, VERTICAL**

ITEM NO.	DESCRIPTION	QTY	755VT8-A2* 7 ½ HP	755VT8-A9* 7 ½ HP	755VT8-A3* 7 ½ HP	755VT8-A4* 7 ½ HP	755VT8-A8* 7 ½ HP
1	COMPRESSOR CT 55	1	CCC1791	<	<	<	<
2	MOTOR	1	VM1025	VM1028	VM1024	VM1024	VM1029
3	PULLEY	1	VDB339	<	<	<	<
4	INNER SCREEN (BELT GUARD)	1	CAF2487	<	<	<	<
5	OUTER BELT GUARD	1	CAF2486	<	<	<	<
6	VERTICAL TANK	1	OQA218	<	<	<	<
7	DISCHARGE PIPE CT 55	1	OFF911A	<	<	<	<
9	BUSHING, 2" X ¼"	1	VA12JBQ	<	<	<	<
10	COCK, DRAIN	1	VV514	<	<	<	<
11	PRESSURE SWITCH	1	VSA360	<	<	<	<
12	PRESSURE SWITCH, TREE	1	CCC1676	<	<	<	<
13	DRAIN COCK	1	VV514	<	<	<	<
14	SAFETY VALVE	1	VV404	<	<	<	<
15	PRESSURE GAUGE, AIR	1	VA302	<	<	<	<
16	STUD MTG, 5/16 -18 X 2-1/2"LG	4	CCC1814	<	<	<	<
17	WASHER, RUBBER	4	VH1320	<	<	<	<
18	NUT, 5/16-18	4	VH1536	<	<	<	<
19	TUBING, ¼"	1	OFF909	<	<	<	<
20	ELBOW, 90°	1	VA15ACE	<	<	<	<
21	CHECK VALVE	1	VV836	<	<	<	<
22	COMPRESSION CONNECTOR	1	VA14EHE	<	<	<	<
23	V-BELT	1	VD323	<	<	<	<
24	BRACKET BELTGUARD TOP	1	CAF2526	<	<	<	<
25	BELT GUARD CLIPS	5	CAF2488	<	<	<	<
26	HHCS ¼-20 X 1/2LG	12	VH51FE1	<	<	<	<
27	FITTING, COMPR., ½ X 3/4	1	VA14DHE	<	<	<	<
28	FILTER, INTAKE ASSY	1	VA1166	<	<	<	<
29	FILTER, INTAKE ELEMENT	1	VA1163	<	<	<	<
30	NUTS, WIRE BELT GUARD	2	VH515	<	<	<	<
31	BOLT, 3/8-1" LG.	3	VH10KH	<	<	<	<
32	WASHER, RUBBER	4	VH1321	<	<	<	<
33	NUT	4	VH1537	<	<	<	<
34	HHCS 5/16-18UNC X 1, MOUNTING BELTGUARD TO FRAME (NOT SHOWN)	3	VH12HH	<	<	<	<
35	MOTOR BOLT	1	OFA299	<	<	<	<
36	TAKE-UP, MOTOR BOLT	1	OFC256	<	<	<	<
37	STARTER KIT, (OPTIONAL)	1	CY60K	CY60R	CY60J	CY60I	CY60S
38	HP 1/8" ASME SAFETY VALVE	2	CCC1718	<	<	<	<

\* A2 = 1/60/230

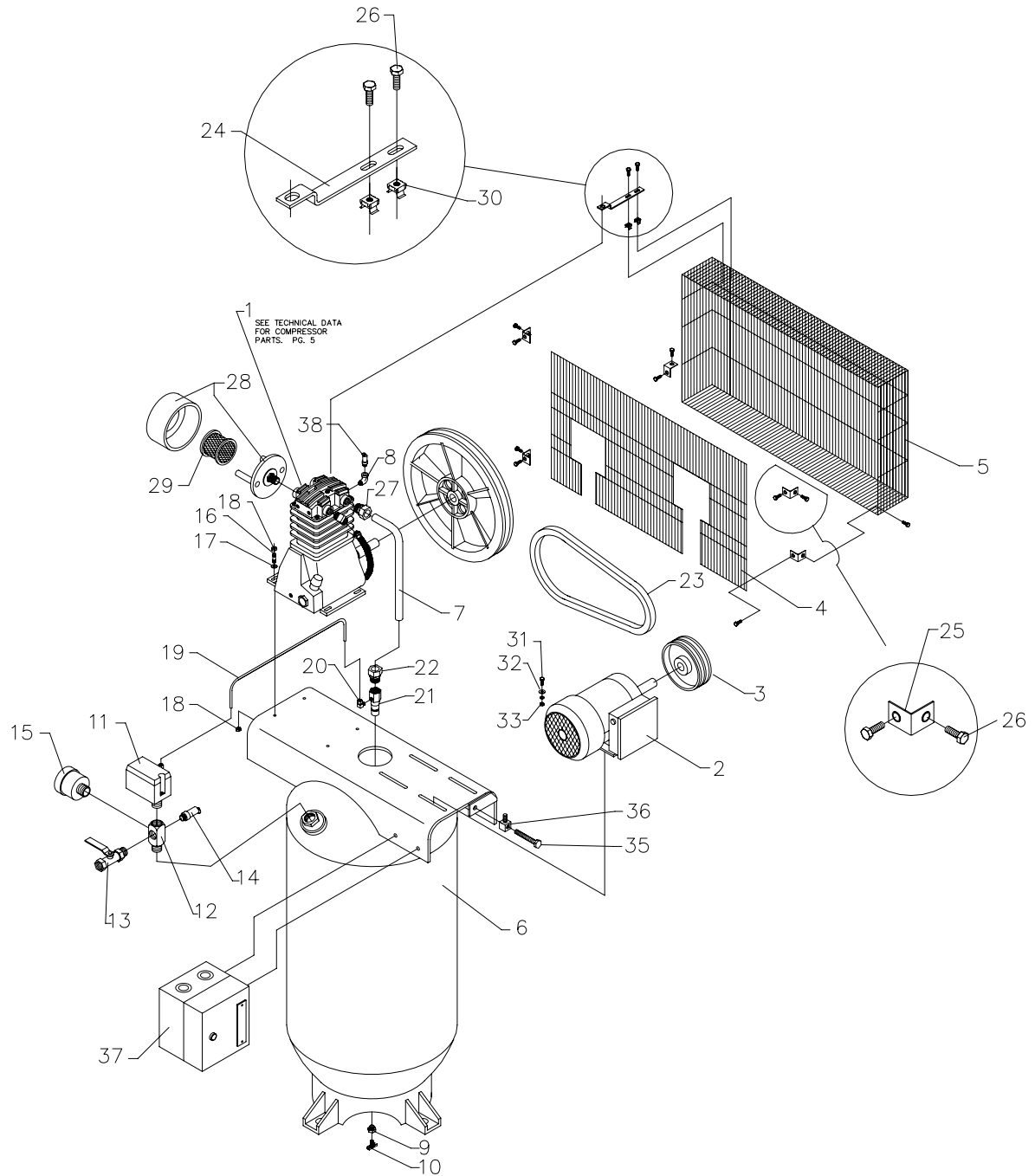
\* A9 = 3/60/200

\* A3 = 3/60/230

\* A4 = 3/60/460

\* A8 = 3/60/575

**EXPLODED VIEW, VERTICAL, 7 1/2HP, 80 GALLON – MODEL 775VT8**



**PARTS LIST, VERTICAL**

ITEM NO.	DESCRIPTION	QTY.	775VT8-A2* 7 ½ HP	775VT8-A3* 7 ½ HP	775VT8-A4* 7 ½ HP	775VT8-A8* 7 ½ HP	775VT8-A9* 7 ½ HP
1	COMPRESSOR CT 75	1	CCC1792	<	<	<	<
2	MOTOR	1	VM1025	VM1024	VM1024	VM1029	VM1028
3	PULLEY	1	VDB340	<	<	<	<
4	INNER SCREEN (BELT GUARD)	1	CAF2487	<	<	<	<
5	OUTER BELT GUARD	1	CAF2486	<	<	<	<
6	VERTICAL TANK	1	OQA218	<	<	<	<
7	DISCHARGE PIPE CT 75	1	OFF910A	<	<	<	<
8	BUSHING, 2 X ¼"	1	VA12JBQ	<	<	<	<
9	COCK, DRAIN	1	VV514	<	<	<	<
10	FITTING, COMPRESSION	1	VA14EJE	<	<	<	<
11	PRESSURE SWITCH	1	VSA362	<	<	<	<
12	PRESSURE SWITCH, TREE	1	CCC1677	<	<	<	<
13	DRAIN COCK	1	VV552	<	<	<	<
14	SAFETY VALVE	1	VV404	<	<	<	<
15	PRESSURE GAUGE, AIR	1	VA334	<	<	<	<
16	STUD, MTG	4	CCC1814	<	<	<	<
17	WASHER, RUBBER	4	VH1320	<	<	<	<
18	NUT, 5/16-18	4	VH1536	<	<	<	<
19	TUBING, ¼"	1	OFF909	<	<	<	<
20	ELBOW, 90°	1	VA15ACE	<	<	<	<
21	CHECK VALVE	1	VV809	<	<	<	<
22	COMPRESSION CONNECTOR	1	VA14EJE	<	<	<	<
23	V-BELT	2	VD351	<	<	<	<
24	BRACKET BELTGUARD TOP	1	CAF2525	<	<	<	<
25	BELT GUARD CLIPS	5	CAF2488	<	<	<	<
26	HHCS ¼-20 X 1/2LG, SERRATED	10	VH51FE1	<	<	<	<
27	FILTER, INTAKE ASSY.	1	VA1164	<	<	<	<
28	FILTER, INTAKE ELEMENT	1	VA1165	<	<	<	<
29	NUTS, WIRE BELT GUARD	2	VH515	<	<	<	<
30	BOLT	3	VH10KH	<	<	<	<
31	WASHER, RUBBER	4	VH1321	<	<	<	<
32	NUT	4	VH1537	<	<	<	<
33	HHCS 5/16-18UNC X 1, (MTG BELTGUARD TO FRAME)	3	VH1108	<	<	<	<
34	MOTOR BOLT	1	OFA299	<	<	<	<
35	TAKE-UP, MOTOR BOLT	1	OFC256	<	<	<	<
36	STARTER KIT, (OPTIONAL)	1	CY60H	CY60E	CY60F	CY60S	CY60R
37	HP 1/8" ASME SAFETY VALVE	2	CCC1718	<	<	<	<

\* A2 = 1/60/230

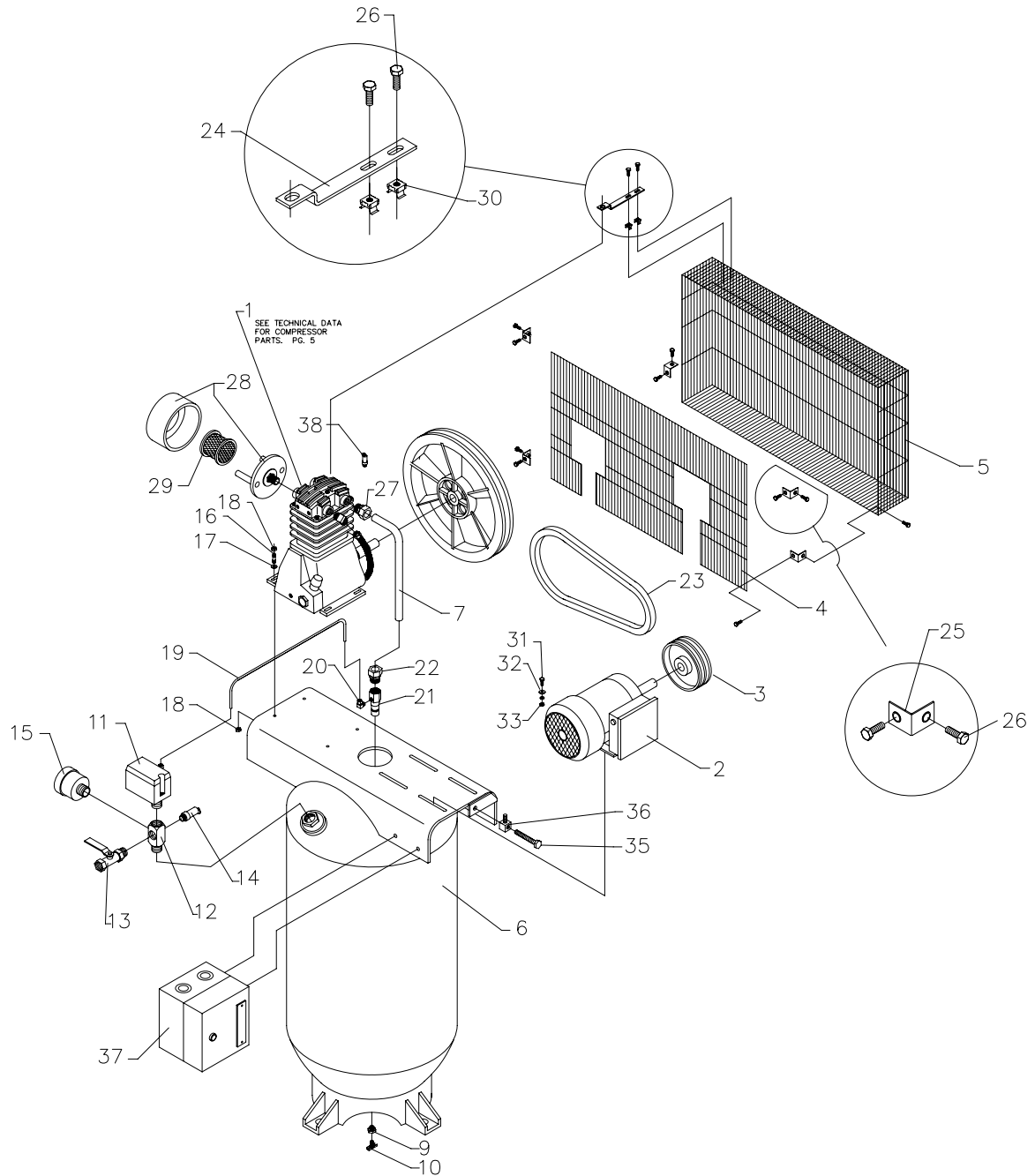
\* A3 = 3/60/230

\* A4 = 3/60/460

\* A8 = 3/60/575

\* A9 = 3/60/200

**EXPLODED VIEW, VERTICAL, 10HP, 80 GALLON – MODEL 1075VT8**





**PARTS LIST, VERTICAL**

ITEM NO.	DESCRIPTION	QTY.	1075VT8-A2* 10 HP	1075VT8-A3* 10 HP	1075VT8-A4* 10 HP	1075VT8-A8* 10 HP	1075VT8-A9* 10 HP
1	COMPRESSOR CT 75	1	CCC1792	<	<	<	<
2	MOTOR	1	VM1107	VM1024	VM1024	VM1029	VM1028
3	PULLEY	1	VDA282A	<	<	<	<
4	INNER SCREEN (BELT GUARD)	1	CAF2487	<	<	<	<
5	OUTER BELT GUARD	1	CAF2486	<	<	<	<
6	VERTICAL TANK	1	OQA218	<	<	<	<
7	DISCHARGE PIPE CT 75	1	OFF910A	<	<	<	<
9	BUSHING, 2 X 1/4"	1	VA12JBQ	<	<	<	<
10	COCK, DRAIN	1	VV514	<	<	<	<
11	PRESSURE SWITCH	1	VSA362	<	<	<	<
12	PRESSURE SWITCH, TREE	1	CCC1677	<	<	<	<
13	DRAIN COCK	1	VV552	<	<	<	<
14	SAFETY VALVE	1	VV404	<	<	<	<
15	PRESSURE GAUGE, AIR	1	VA334	<	<	<	<
16	STUD, MTG	4	CCC1678	<	<	<	<
17	WASHER, RUBBER	4	VH1320	<	<	<	<
18	NUT, 5/16-18	4	VH1536	<	<	<	<
19	TUBING, 1/4"	1	OFF909	<	<	<	<
20	ELBOW, 90°	1	VA15ACE	<	<	<	<
21	CHECK VALVE	1	VV809	<	<	<	<
22	COMPRESSION CONNECTOR	1	VA14EJE	<	<	<	<
23	V-BELT	2	VD393	<	<	<	<
24	BRACKET BELTGUARD TOP	1	CAF2525	<	<	<	<
25	BELT GUARD CLIPS	5	CAF2488	<	<	<	<
26	HHCS 1/4-20 X 1/2LG, SERRATED	12	VH12FF1	<	<	<	<
27	FITTING, ELBOW COMPRESSION 3/4 NPT X 7/8"OD TUBE	1	VA15EJE	<	<	<	<
28	FILTER, INTAKE ASSY.	1	VA1164	<	<	<	<
29	FILTER, INTAKE ELEMENT	1	VA1165	<	<	<	<
30	NUTS, WIRE BELT GUARD	2	VH515	<	<	<	<
31	BOLT	3	VH10KK1	<	<	<	<
32	WASHER, RUBBER	4	VH1321	<	<	<	<
33	NUT	4	VH1537	<	<	<	<
34	HHCS 5/16-18UNC X 1, (NOT SHOWN) (MTG BELTGUARD TO FRAME)	3	VH12HF1	<	<	<	<
35	TAKE-UP, MOTOR BOLT	1	OF269	<	<	<	<
36	MOTOR BOLT	1	OFA299	<	<	<	<
37	STARTER KIT, (OPTIONAL)	1	CY60H	CY60E	CY60F	CY60S	CY60R
38	HP 1/8" ASME SAFETY VALVE	2	CCC1718	<	<	<	<

\* A2 = 1/60/230

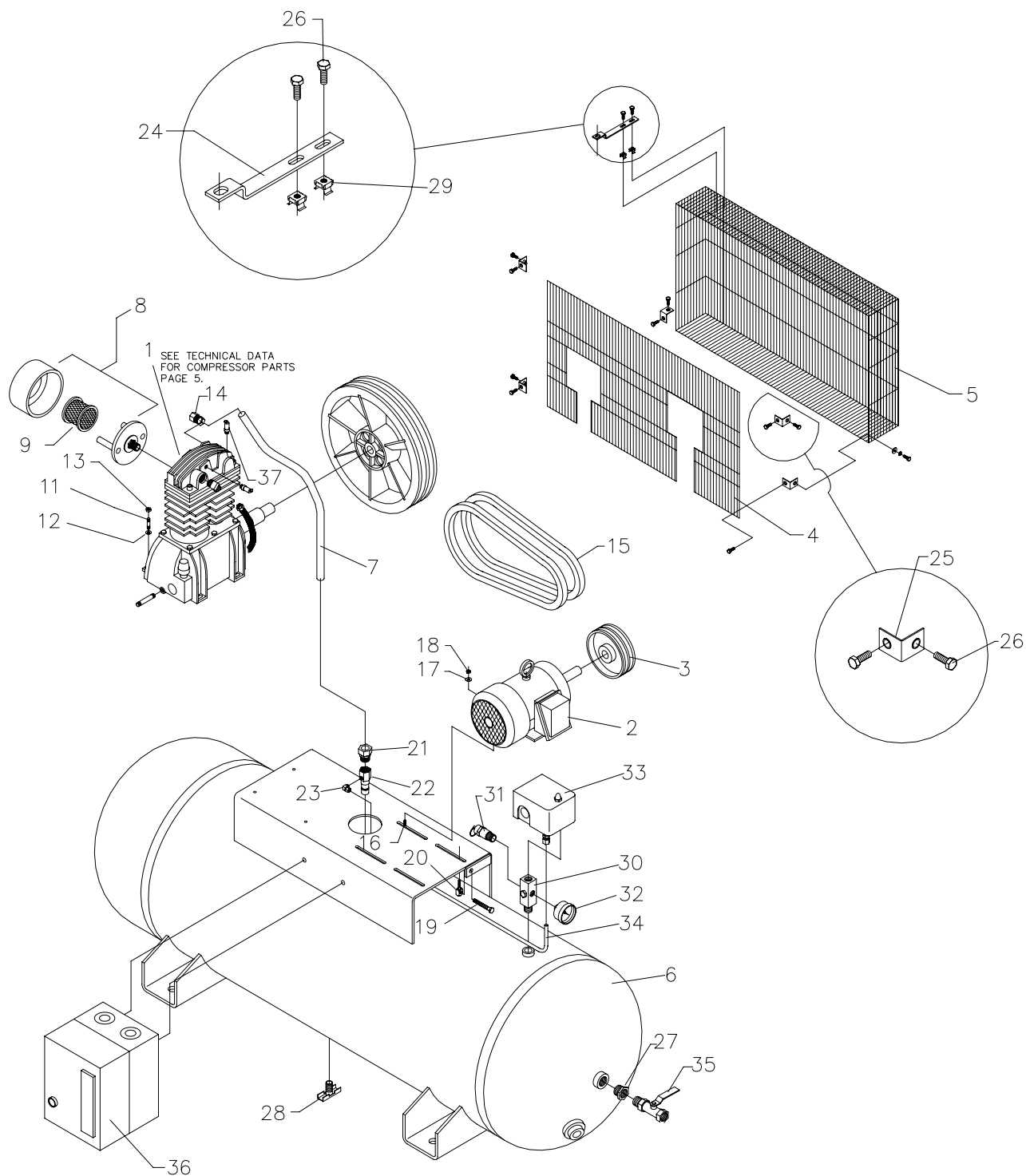
\* A3 = 3/60/230

\* A4 = 3/60/460

\* A8 = 3/60/575

\* A9 = 3/60/200

**EXPLODED VIEW, HORIZONTAL, 7 1/2HP, 120 GALLON – MODEL 775HT12**



**PARTS LIST, HORIZONTAL**

ITEM NO.	DESCRIPTION	QTY	775HT12-A2* 7 1/2 HP	775HT12-A3* 7 1/2 HP	775HT12-A4* 7 1/2 HP	775HT12-A8* 7 1/2 HP	775HT12-A9* 7 1/2 HP
1	COMPRESSOR, CT 75	1	CCC1792	<	<	<	<
2	MOTOR	1	VM1025	VM1024	VM1024	VM1008	VM1007
3	PULLEY	1	VDB340	<	<	<	<
4	INNER SCREEN (BELT GUARD)	1	CAF2487	<	<	<	<
5	OUTER BELT GUARD	1	CAF2486	<	<	<	<
6	HORIZONTAL TANK	1	OFC320	<	<	<	<
7	DISCHARGE PIPE CT 75	1	OFF910A	<	<	<	<
8	FILTER, INTAKE ASSEMBLY	1	VA1164	<	<	<	<
9	FILTER, INTAKE ELEMENT	1	VA1165	<	<	<	<
10	HHCS 5/16-18UNC X 1, MTG BELTGUARD TO FRAME (NOT SHOWN)	3	VH1108	<	<	<	<
11	STUD MOUNTING, 5/16 - 18 X 2-1/2	4	CCC1814	<	<	<	<
12	WASHER, RUBBER	4	VH1320	<	<	<	<
13	NUT	4	VH1536	<	<	<	<
14	ELBOW COMPRESSION FITTING, 3/4 X 7/8OD	1	VA14EJE	<	<	<	<
15	V-BELT	2	VD323	<	<	<	<
16	BOLT, CARRIAGE	3	VH10KM	<	<	<	<
17	WASHER, RUBBER	4	VH1321	<	<	<	<
18	NUT	4	VH1537	<	<	<	<
19	MOTOR TAKE UP-BOLT	1	OF269	<	<	<	<
20	BOLT, MOTOR	1	OFA299	<	<	<	<
21	COMPRESSION CONNECTOR	1	VA14EJE	<	<	<	<
22	CHECK VALVE	1	VV817	<	<	<	<
23	ELBOW	1	VA15ACE	<	<	<	<
24	BRACKET BELTGUARD TOP	1	CAF2525	<	<	<	<
25	BELT GUARD CLIPS	5	CAF2488	<	<	<	<
26	HHCS 1/4-20 X 1/2LG, SERRATED	12	VH51FE1	<	<	<	<
27	WASHER, FLAT	1	VH32P	<	<	<	<
28	DRAIN COCK	1	VV514	<	<	<	<
29	NUTS, WIRE BELT GUARD	2	VH515	<	<	<	<
30	MANIFOLD	1	CCC1681	<	<	<	<
31	SAFETY VALVE, 3/8 MPT ASME	1	VV404	<	<	<	<
32	PRESSURE GAUGE, AIR	1	VA302	<	<	<	<
33	PRESSURE SWITCH	1	VSA362	<	<	<	<
34	TUBING, 1/4"	1	OFB892CD	<	<	<	<
35	VALVE, BALL	1	VV553	<	<	<	<
36	STARTER KIT (OPTIONAL)	1	CY60AA	CY60AB	CY60AC	CY60AD	CY60AE
37	HP 1/8" ASME SAFETY VALVE	2	CCC1718	<	<	<	<

\* A2 = 1/60/230

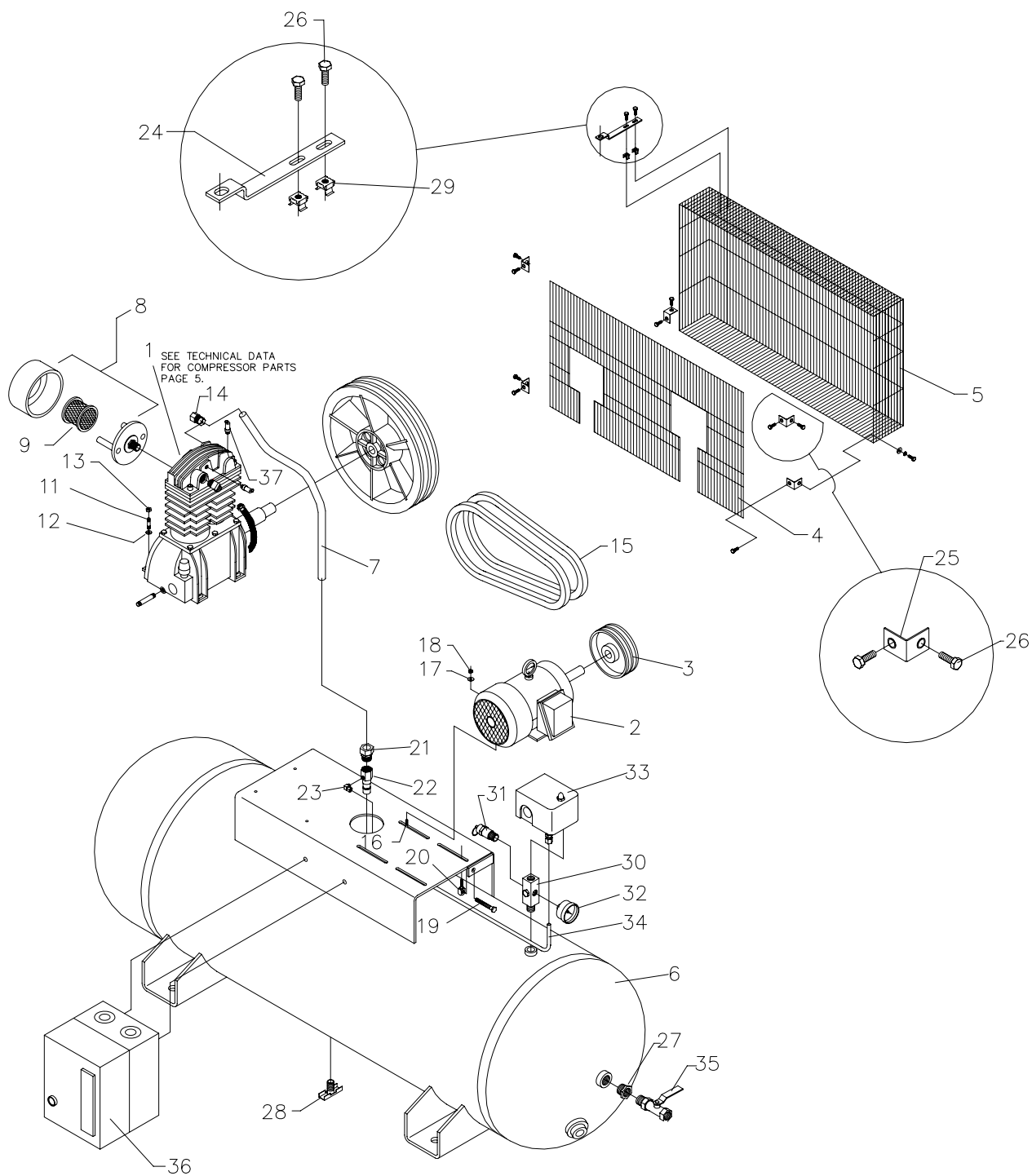
\* A3 = 3/60/230

\* A4 = 3/60/460

\* A8 = 3/60/575

\* A9 = 3/60/200

**EXPLODED VIEW, HORIZONTAL, 10HP, 120 GALLON –MODEL 1075HT12**



**PARTS LIST, HORIZONTAL**

ITEM NO.	DESCRIPTION	QTY	1075HT12-A3* 10 HP	1075HT12-A4* 10 HP	1075HT12-A8* 10 HP	1075HT12-A9* 10 HP
1	COMPRESSOR, CT 75	1	CCC1792	<	<	<
2	MOTOR	1	VM 1100	VM 1100	VM1127	VM1126
3	PULLEY	1	VDA282A	<	<	<
4	INNER SCREEN (BELT GUARD)	1	CAF2487	<	<	<
5	OUTER BELT GUARD	1	CAF2486	<	<	<
6	HORIZONTAL TANK	1	OFC320	<	<	<
7	DISCHARGE PIPE CT75	1	OFF910A	<	<	<
8	FILTER, INTAKE ASSEMBLY	1	VA1164	<	<	<
9	FILTER, INTAKE ELEMENT	1	VA1165	<	<	<
10	HHCS 5/16-18UNC X 1, MTGBELTGUARD TO FRAME	3	VH1108	<	<	<
11	STUD MOUNTING, 5/16 - 18 X 2-1/2	4	CCC1814	<	<	<
12	WASHER, RUBBER	4	VH1320	<	<	<
13	NUT	4	VH1536	<	<	<
14	ELBOW COMPRESSION FITTING, 3/4 X 7/8OD	1	VA14EJE	<	<	<
15	V-BELT	2	VD393	<	<	<
16	BOLT, CARRIAGE	3	VH10KM	<	<	<
17	WASHER, RUBBER	4	VH1321	<	<	<
18	NUT	4	VH1537	<	<	<
19	MOTOR TAKE UP-BOLT	1	OF269	<	<	<
20	BOLT, MOTOR	1	OFA299	<	<	<
21	COMPRESSION CONNECTOR	1	VA14EJE	<	<	<
22	CHECK VALVE	1	VV817	<	<	<
23	ELBOW	1	VA15ACE	<	<	<
24	BRACKET BELTGUARD TOP	1	CAF2525	<	<	<
25	BELT GUARD CLIPS	5	CAF2488	<	<	<
26	HHCS 1/4-20 X 1/2LG, SERRATED	12	VH51FE1	<	<	<
28	DRAIN COCK	1	VV514	<	<	<
29	NUTS, WIRE BELT GUARD	2	VH515	<	<	<
30	MANIFOLD	1	CCC1681	<	<	<
31	SAFETY VALVE, 3/8 MPT ASME	1	VV404	<	<	<
32	PRESSURE GAUGE, AIR	1	VA302	<	<	<
33	PRESSURE SWITCH	1	VSA362	<	<	<
34	TUBING, 1/4"	1	OFB892CD	<	<	<
35	VALVE, BALL, 3/4"MALE X 3/4" FEMALE	1	VV553	<	<	<
36	STARTER KIT (OPTIONAL)	1	CY60D	CY60 E	CY60U	CY60T
37	HP 1/8" ASME SAFETY VALVE	2	CCC1718	<	<	<

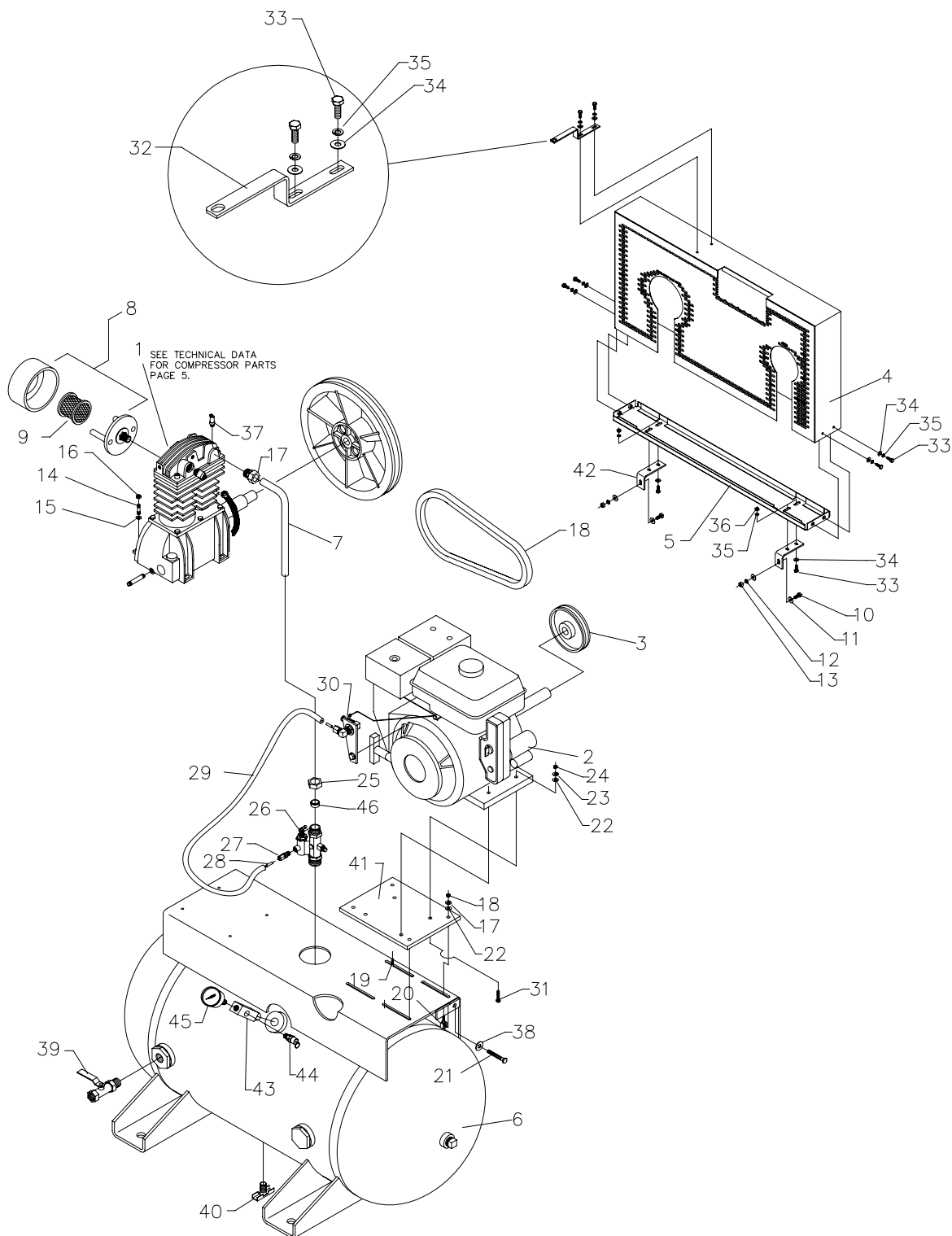
\* A3 = 3/60/230

\* A4 = 3/60/460

\* A8 = 3/60/575

\* A9 = 3/60/200

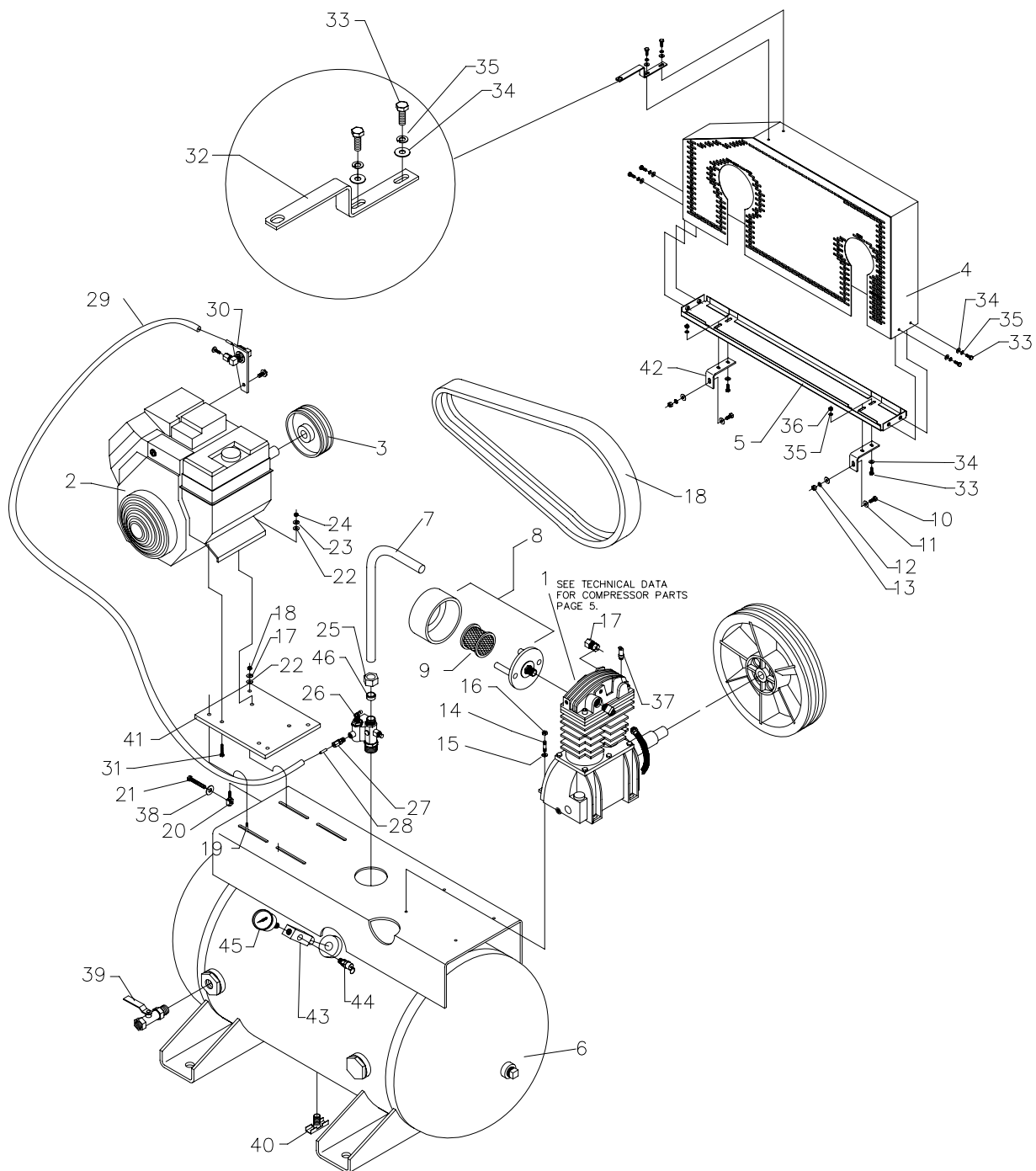
**EXPLODED VIEW, HORIZONTAL, 13HP-HONDA**



**PARTS LIST, HORIZONTAL, HONDA ENGINE**

ITEM NO.	DESCRIPTION	QTY	1375GT3-HE 13 HP	1375GT6-HE 13 HP
1	COMPRESSOR, CT 75	1	CCC1792	<
2	ENGINE, HONDA GAS	1	VN1036	<
3	PULLEY	1	VDB351	<
4	BELT GUARD	1	CAF2513P	<
5	PAN, BELT GUARD	1	CAF2514P	<
6	HORIZONTAL TANK	1	OFC247M	OFC248L
7	DISCHARGE PIPE, CT75	1	OFF927	<
8	FILTER, INTAKE ASSEMBLY	1	VA1164	<
9	FILTER, INTAKE ELEMENT	1	VA1165	<
10	HHCS 5/16-18UNC X 1, MTG BELTGUARD TO FRAME	2	VH12HF	<
11	WASHER, FLAT 3/4	4	VH32H	<
12	WASHER, LOCK 5/16	2	VH35H	<
13	NUT, 5/16	2	VH15H	<
14	STUD MOUNTING, 5/16 - 18 X 2-1/2	4	CCC1814	<
15	WASHER, RUBBER	4	VH1320	<
16	NUT	4	VH1536	<
17	STRAIGHT CONNECTOR, COMPRESSION FITTING, 3/4 X 3/4OD	1	VA14EJE	<
18	V-BELT	1	VD371	<
19	BOLT, CARRIAGE	3	VH10KM	<
20	BOLT, MOTOR	1	OFC290	<
21	MOTOR TAKE UP-BOLT	1	OFC256	<
22	WASHER, FLAT 3/8	8	VH33K	<
23	WASHER, LOCK 3/8	8	VH35K	<
24	NUT, 3/8	8	VH15K	<
25	COMPRESSION CONNECTOR	1	VA779	<
26	VALVE, DISCHARGE LINE UNLOADER	1	VV1009	<
27	CONNECTION COMPRESSION STRAIGHT	1	VA14EJE	<
28	INSERT	2	VA1620	<
29	COPPER TUBING	1	OFD806	<
30	SLOW DOWN DEVICE	1	VN109	<
31	HHCS-3/8-16UNC X 1 1/4LG	4	VH12KK	<
32	BRACKET, BELTGUARD TOP	1	CAF2535	<
33	HHCS, 1/4-20 X 3/4 LG	10	VH12FF	<
34	WASHER, FLAT 1/4	10	VH32F	<
35	WASHER, LOCK 1/4	10	VH35F1	<
36	NUT, HEX 1/4-20	4	VH15F1	<
37	HP 1/8" ASME SAFETY VALVE	1	CCC1718	<
38	WASHER, STEEL CUT	1	VH32D	<
39	VALVE, BALL	1	VV552	<
40	DRAIN, COCK	1	VV514	<
41	PLATE, ENGINE MOUNTING	1	CAF2334	<
42	BRACKET, BELTGUARD	2	CAE2284	<
43	MANIFOLD	1	CCC1695	<
44	SAFETY VALVE, 3/8 MPT ASME	1	VV404	<
45	PRESSURE GAUGE, AIR	1	VA302	<
46	SLEEVE, BRASS 3/4"	1	VA778	<

**EXPLODED VIEW, HORIZONTAL, 13HP, KOHLER ENGINE**





**PARTS LIST, HORIZONTAL, KOHLER ENGINE**

ITEM NO.	DESCRIPTION	QTY	1375GT3-KC 13 HP	1375GT6-KC 13 HP
1	COMPRESSOR, CT 75	1	CCC1792	<
2	ENGINE, KOHLER GAS	1	VN1034	<
3	PULLEY	1	VDB351	<
4	BELT GUARD	1	CAF2337P	<
5	PAN, BELT GUARD	1	CAB2295P	<
6	HORIZONTAL TANK	1	OFC247P	OFC248N
7	DISCHARGE PIPE, CT75	1	OFF928	<
8	FILTER, INTAKE ASSEMBLY	1	VA1164	<
9	FILTER, INTAKE ELEMENT	1	VA1165	<
10	HHCS 5/16-18UNC X 1, MTG BELTGUARD TO FRAME	2	VH12HF	<
11	WASHER, FLAT 3/4	4	VH32H	<
12	WASHER, LOCK 5/16	2	VH35H	<
13	NUT, 5/16	2	VH15H	<
14	STUD MOUNTING, 5/16 - 18 X 2-1/2	4	CCC1814	<
15	WASHER, RUBBER	4	VH1320	<
16	NUT	4	VH1536	<
17	STRAIGHT CONNECTOR, COMPRESSION FITTING 3/4 X 3/4 OD	1	VA14EJE	<
18	V-BELT	1	VD371	<
19	BOLT, CARRIAGE	3	VH10KN	<
20	BOLT, MOTOR	1	OFC290	<
21	MOTOR TAKE UP-BOLT	1	OF269	<
22	WASHER, FLAT 3/8	8	VH32K	<
23	WASHER, LOCK 3/8	8	VH35K	<
24	NUT, 3/8	8	VH15K	<
25	COMPRESSION CONNECTOR	1	VA14EJE	<
26	VALVE, DISCHARGE LINE UNLOADER	1	VV1009	<
27	CONNECTION COMPRESSION STRAIGHT	1	VA14ACE	<
28	INSERT	2	VA1620	<
29	NYLON TUBING	1	VA1601	<
30	SLOW DOWN DEVICE	1	VN112	<
31	HHCS-3/8-16UNC X 1 1/4LG	4	VH12KK	<
32	BRACKET, BELTGUARD TOP	1	CAF2534	<
33	HHCS, 1/4-20 X 3/4 LG	10	VH12FF	<
34	WASHER, FLAT 1/4	10	VH32F	<
35	WASHER, LOCK 1/4	10	VH35F1	<
36	NUT, HEX 1/4-20	4	VH15F1	<
37	HP 1/8" ASME SAFETY VALVE	1	CCC1718	<
38	WASHER, STEEL CUT	1	VH32P	<
39	VALVE, BALL	1	VV552	<
40	DRAIN, COCK	1	VV514	<
41	PLATE, ENGINE MOUNTING	1	CAF2334	<
42	BRACKET, BELTGUARD	2	CAE2286	<
43	MANIFOLD	1	CCC1695	<
44	SAFETY VALVE, 3/8 MPT ASME	1	VV404	<
45	PRESSURE GAUGE, AIR	1	VA302	<
46	SLEEVE-BRASS 3/4"	1	VA778	<

## BOLT TORQUES

TORQUE	MODEL CT-55		MODEL CT-75	
	N.m.	Ft.lbs	N.m.	Ft.lbs
CONNECTING ROD BOLTS	22	16	30	22
CYLINDER HEAD SCREWS	50	38	60	44
CYLINDER TO CRANKCASE SCREWS	50	38	60	44
FLYWHEEL BOLT	50	38	50	38

## COMPRESSOR PUMP-UP TIME

### TWO STAGE

H.P. Size	Compressor Model No.	R.P.M.	C.F.M. @ 150 psi	Tank Size		Approx. Time Required To Pump From:	
				Size (in)	Gal	0 to 150 PSIG Min. – Sec.	120 to 150 PSIG Min. – Sec.
5	555VT6	869	17.8	20" X 48"	60	4' – 48"	0' – 48"
5	555VT8HS*	869	17.8	24" X 46"	80	6' – 49"	1' – 4"
5	555VT8	869	17.8	24" X 46"	80	6' – 43"	1' – 4"
7 1/2	755VT8	945	23.5	24" X 46"	80	5' – 36"	0' - 55"
7 1/2	775VT8	872	29.6	24" X 46"	80	4' – 21"	0' - 41"
10	1075HT12	1042	34.1	24" X 68"	120	5' – 43"	0' - 55"

\* HS = HI SPEED

TROUBLESHOOTING

	SYMPTOMS	CAUSES	REMEDIES
WHEN COMPRESSOR CAN BE STARTED	Flywheel rotation in wrong direction	1. Incorrect connection of motor terminal.	1. Re-arrange terminal connection.
	Overheating of bearings	1. Insufficient lubrication. 2. Bad lubrication system. 3. Crankshaft bearings too tight. 4. Belts too tight	1. Add lubrication oil. 2. Examine the system. 3. Readjust load on bearings. 4. Adjust belt tension
	Flywheel rotation slows down	1. Heavy lubrication oil. 2. Drop in voltage. 3. Belts slipping.	1. Refill with lighter lubrication oil. 2. Contact power company or install a transformer. 3. Tighten belts
	Severe vibration	1. Bent crankshaft 2. Loose belts 3. Unit is not level	1. Remove & Replace 2. Adjust belt tension 3. Level unit
	Abnormal noise	1. Loose valve assembly. 2. Piston hits cylinder cover. 3. Worn connecting rod.	1. Tighten valve bolt and lock nut. 2. Check piston & rod assembly for excessive wear.
	Pressure cannot be built up or only up to a certain extent	1. Worn valve plate. 2. Dirt on the valve plate. 3. Leaks from safety valve. 4. Leaks from bolt holes. 5. Uneven valve seat surface. 6. Excessive blow by on piston rings. 7. Bad packing (gasket too thick). 8. Excessive air leaks.	1. Repair or replace valve plate. 2. Remove and clean it. 3. Repair or replace safety valve. 4. Tighten the nuts even with packing. 5. Remove and lap the surface. 6. Replace with new ones 7. Replace packing (gasket). 8. Eliminate air leaks.
	Inaccuracy of pressure gauge	1. Pressure gauge damaged.	1. Replace.
	Excessive oil consumption	1. Worn piston ring 2. Worn piston. 3. Worn cylinder 4. Wrong oil 5. Dirty filter	1. Replace. 2. Replace. 3. Replace. 4. Replace with correct oil. 5. Replace
	Slipping of belts	1. Working pressure too high. 2. Improper belt tension. 3. Worn belt.	1. Lower working pressure. 2. Adjust belt tension. 3. Replace with new ones.
	Overheating of electric motors	1. Overloading of motor due to excessive working pressure (higher than stipulated pressure). 2. Burnt piston. 3. Burnt bearing metals. 4. Drop of voltage or low voltage 5. Loose connections	1. Lower working pressure. 2. Rebuild compressor. 3. Rebuild compressor. 4. Contact power company or install a transformer 5. Inspect and tighten connections.
WHEN COMPRESSOR CANNOT BE STARTED	Unit will not start	1. Breakdown of electric current. 2. Line failure. 3. Malfunction of motor	1. Contact power company. 2. Examine the line. Replace with new wiring. (See page 24) 3. Contact motor manufacturer.
	Fuse tends to blow	1. Incorrect size. 2. Wrong connections 3. Overloading of motor. 4. Overloading of motor due to leaks of check valve.	1. Replace with correct size. 2. Change connections. 3. Eliminate the loading. 4. Remove and repair check valve.

## **RECOMMENDED STATEMENT ON DRYERS AND FILTERS**

Liquid water occurs naturally in air-lines as a result of compression. Moisture vapor in ambient air is concentrated when pressurized and condenses when cooled in downstream air piping.

Compressed air dryers reduce water vapor concentration and prevent liquid water formation in compressed air lines. Dryers are necessary companion to air filters, aftercoolers, and automatic tank drains for improving the productivity of compressed air systems.

Water and water vapor removal increases the efficiency of air operated equipment, reduces contamination and rusting, increases service life of pneumatic equipment and tools, prevents air line freeze ups, and reduces product rejects. The use of dryer's filters is recommended when this moisture related problems are reported to our factory or distributor service departments.

### Troubleshooting guide

Symptom: Liquid water present in compressed air-lines.

Problem: Water vapor condensation from cooling and compression occurs naturally

Solution: Remove the water vapor from compressed air prior to distribution through the air system. Check operation of after-cooler and moisture separator. Install a compressed air dryer sized for the flow and dryness level required.

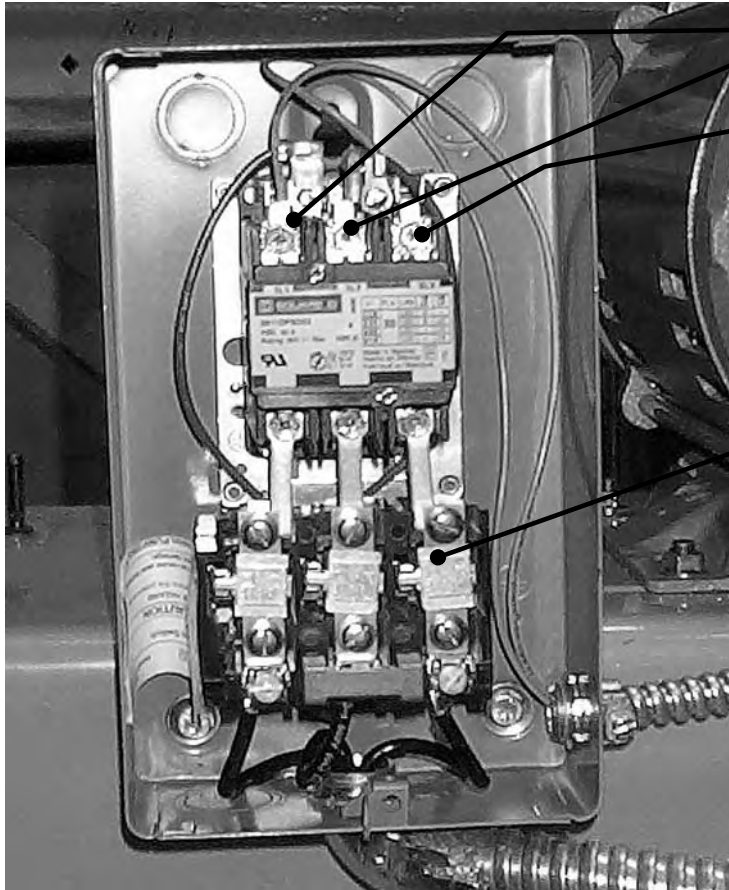
(Note: filters may also be required to remove particles, liquid oil aerosols, or for oil vapor removal. Change cartridges as recommended by filter manufacturer.)

Check all drain traps routinely to insure their proper operation. Maintain them regularly.

**WIRING PROCEDURES**

FOR

**3 PHASE FACTORY MOUNTED MOTOR STARTER**



CONNECT INCOMING  
POWER WIRES TO  
STARTER TERMINALS  
L1, L2 & L3.

THERMAL OVERLOADS (3)

**TURN OFF POWER BEFORE SERVICING!!!**

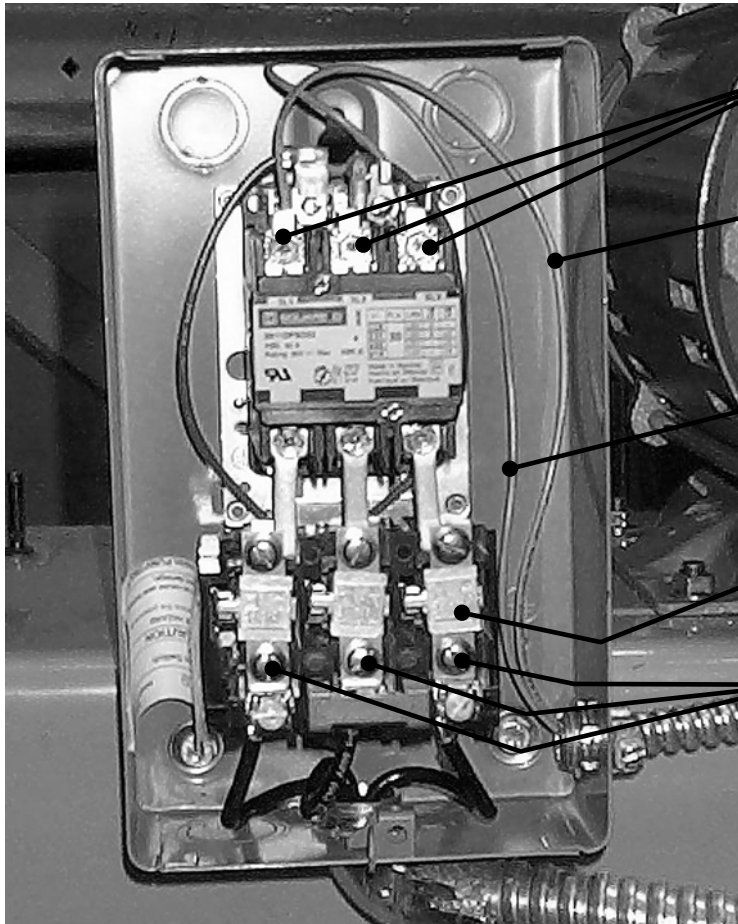
FACTORY MOUNTED MOTOR STARTERS ARE SUPPLIED WITH PRESSURE SWITCH AND MOTOR CONNECTIONS TO STARTER.

1. CONNECT INCOMING POWER WIRES TO STARTER TERMINALS L1, L2 AND L3.
2. COMPRESSOR FLYWHEEL ROTATION SHOULD BE COUNTERCLOCKWISE WHEN FACING FLYWHEEL.
3. IF COMPRESSOR FLYWHEEL ROTATION IS REVERSED, INTERCHANGE SERVICE WIRES TO STARTER TERMINALS L1 AND L2.

**WIRING PROCEDURE**

FOR

**3 PHASE FIELD MOUNTED MOTOR STARTER**



CONNECT INCOMING  
POWER WIRES TO  
STARTER TERMINALS  
L1, L2, L3

CONNECT ONE WIRE  
FROM PRESSURE SWITCH  
TO STARTER TERMINAL  
L1.

CONNECT SECOND  
WIRE FROM PRESSURE  
SWITCH TO STARTER  
COIL TERMINAL A2.

THERMAL  
OVERLOADS (3)

CONNECT MOTOR  
LEADS TO T1, T2, T3.

**TURN OFF POWER BEFORE SERVICING!!!**

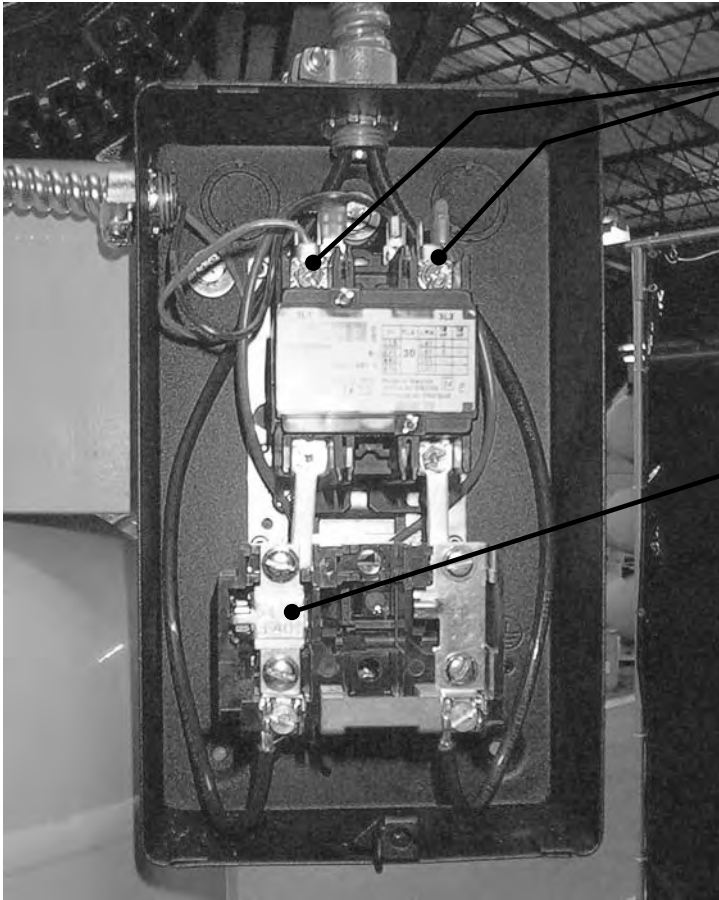
1. CONNECT MOTOR LEADS AS PER DIAGRAM ON MOTOR NAMEPLATE TO STARTER TERMINALS T1, T2 & T3 CONNECT ONE WIRE FROM PRESSURE SWITCH TO STARTER TERMINAL L1 (USE 18 GAUGE WIRE).
2. CONNECT 2<sup>ND</sup> WIRE FROM PRESSURE SWITCH TO STARTER COIL TERMINAL A2 (USE 18 GAUGE WIRE). A2 IS OPEN SPADE CLIP BEHIND L3.
3. CONNECT INCOMING POWER LINES TO STARTER TERMINALS L1, L2 & L3.
4. COMPRESSOR FLYWHEEL ROTATION SHOULD BE COUNTERCLOCKWISE WHEN FACING FLYWHEEL.
5. IF COMPRESSOR FLYWHEEL ROTATION IS REVERSED, INTERCHANGE INCOMING POWER WIRES TO STARTER TERMINALS L1 & L2.

## **CT SERIES**

### **WIRING PROCEDURES**

FOR

### **1 PHASE FACTORY MOTOR STARTER**



CONNECT INCOMING  
POWER WIRES TO  
STARTER TERMINALS  
L1 & L2.

THERMAL OVERLOAD.

## **TURN OFF POWER BEFORE SERVICING!!!**

FACTORY MOTOR STARTERS ARE SUPPLIED WITH PRESSURE SWITCH AND MOTOR CONNECTIONS TO STARTER.

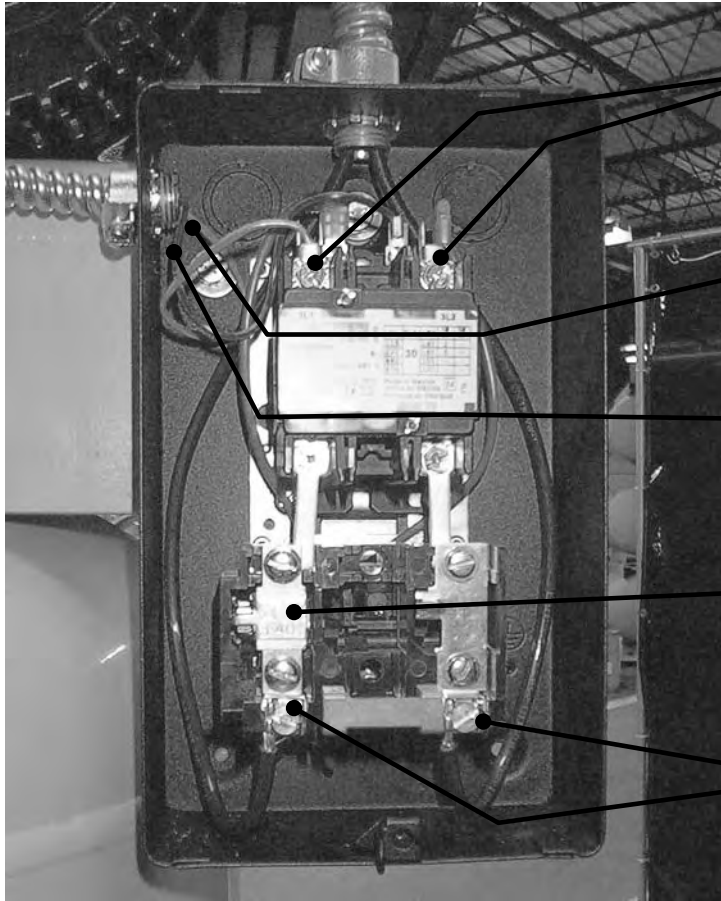
1. CONNECT INCOMING POWER WIRES TO STARTER TERMINALS L1 & L2.

## CT SERIES

### WIRING PROCEDURES

FOR

#### 1 PHASE FIELD MOTOR STARTER



CONNECT INCOMING  
POWER WIRES TO  
STARTER TERMINALS  
L1 & L2.

CONNECT ONE WIRE  
FROM PRESSURE SWITCH  
TO STARTER TERMINAL  
L1.

CONNECT 2<sup>ND</sup> WIRE FROM  
PRESSURE SWITCH TO  
STARTER COIL TERMINAL A2.

THERMAL UNIT

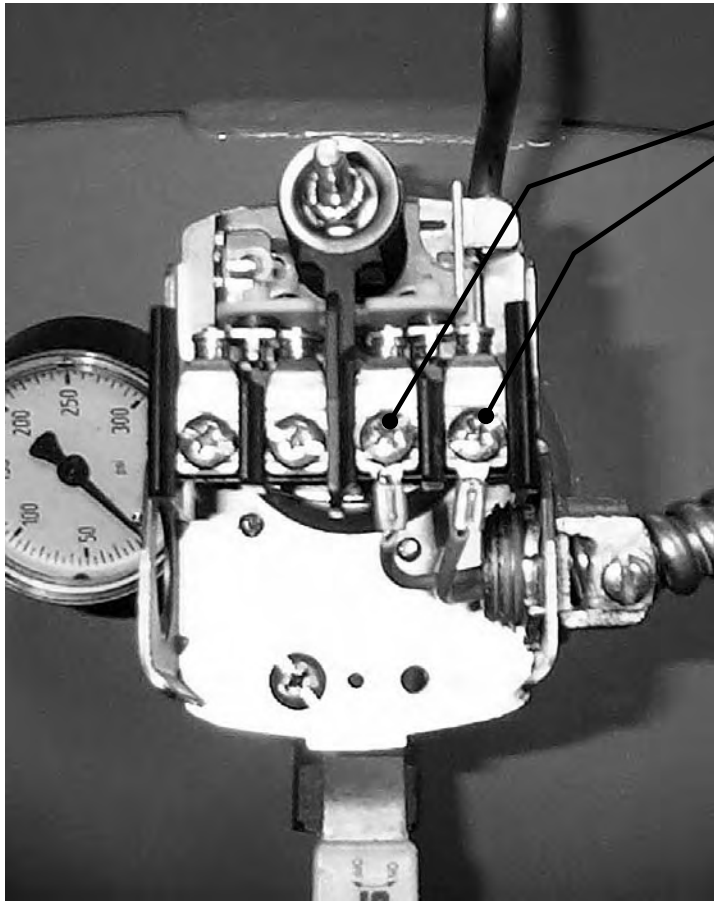
CONNECT MOTOR  
LEADS TO STARTER  
TERMINALS T1 & T2.

## TURN OFF POWER BEFORE SERVICING!!!

1. CONNECT MOTOR LEADS AS PER DIAGRAM ON MOTOR NAMEPLATE TO STARTER TERMINALS T1 & T2.
2. CONNECT ONE WIRE FROM PRESSURE SWITCH TO STARTER TERMINAL L1 (USE 18GA WIRE).
3. CONNECT 2<sup>ND</sup> WIRE FROM PRESSURE SWITCH TO STARTER COIL TERMINAL A2 (USE 18GA WIRE). A2 IS OPEN SPADE CLIP BEHIND L2.
4. CONNECT INCOMING POWER WIRES TO STARTER TERMINALS L1 & L2.



**WIRING PROCEDURES  
FOR  
FIELD INSTALLATION PRESSURE SWITCH  
(WIRED WITH MAGNETIC STARTER.)**



**PRESSURE SWITCH  
CONNECTIONS**

**TURN OFF POWER BEFORE SERVICING!!!**

THE ABOVE PICTURE DEPICTS WIRE CONNECTIONS TO THE PRESSURE SWITCH.

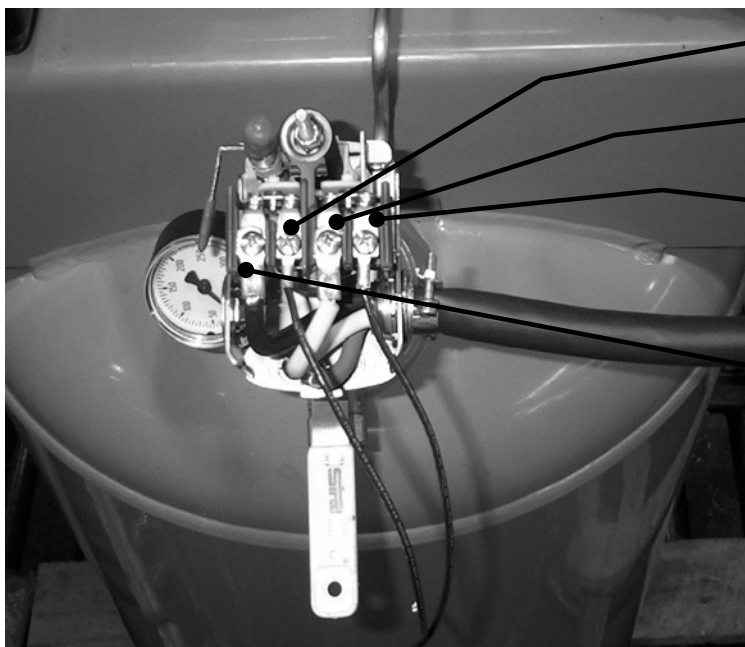
1. FOR FIELD INSTALLATION CONNECT 18GA WIRES FROM PRESSURE SWITCH TO STARTER TERMINALS L1 & A2 AS DESCRIBED ON PAGE 19 AND 21.

**WIRING PROCEDURES**

FOR

**555VT6-A2 & 555VT8-A21 (HI SPEED)**

**FIELD INSTALLATION PRESSURE SWITCH  
WITH OUT MAGNETIC STARTER**



SINGLE PHASE  
POWER SUPPLY  
L1

MOTOR  
CONNECTION

SINGLE PHASE  
POWER SUPPLY  
L2

MOTOR  
CONNECTION

**TURN OFF POWER BEFORE SERVICING!!!**

THE ABOVE PICTURE DEPICTS POWER SUPPLY WIRE CONNECTIONS TO PRESSURE SWITCH.

1. FOR FIELD INSTALLATION CONNECT 8GA WIRES FROM POWER SUPPLY L1 AND L2 TO PRESSURE SWITCH AS DEPICTED ABOVE. MOTOR CONNECTIONS FROM MOTOR TO PRESSURE SWITCH ARE FACTORY INSTALLED.

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