
COMPRESSOR
SOURCE
YOUR AIR COMPRESSOR, COMPRESSOR PARTS, & ACCESSORY SUPERSTORE

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Unpackaging & Handling

We recommend leaving the unit on its shipping skid until it is moved to the final installation site. Make sure the unit is properly handled and secured when moving.

DO NOT USE THE FLYWHEEL AS A LIFT POINT WHEN INSTALLING THIS PUMP.

Safety Guide

Compressor Safety Precautions:

1. Read and understand all instructions completely before operating this compressor.

2. Disengage mains power and disconnect power lines to the machine prior to performing any work or maintenance on this unit.

3. Open the tank discharge valve and relieve all pressure from the tank and compressor lines. Do not attempt to remove any pressurized systems without first relieving the pressure within the unit.

4. Do not attempt to service any part while the machine is in operation.

5. Do not operate the compressor at pressures in excess of its indicated rating on the compressor nameplate.

6. Do not operate the compressor at speeds in excess of its indicated rating on the compressor nameplate.

7. Do not remove any guards, shields, or screens while the compressor is operating. If removed for maintenance, replace before resuming operation.

8. Observe the delivery pressure gauge daily to be sure the automatic control system is operating within the proper limits.

9. Periodically check all safety relief valves for proper operation.

10. Caution: Pressurized air can cause serious injury or death to personnel.

11. Be sure that no tools, rags, or loose parts are left on the compressor or drive parts.

12. Do not use flammable solvents for cleaning parts.

13. Exercise cleanliness during maintenance when making repairs.

    a. Keep dirt away from parts and exposed openings by covering with a clean cloth.

14. Ensure safety relief valves are installed on the compressor and any piping systems connected to the compressor.

15. Do not operate the compressor in areas where there is the possibility of ingesting flammable or toxic gases.

16. Check air supply lines for any signs of wear or deterioration before each use and make certain that all connections are secure.

17. Observe the prescribed maintenance intervals.

18. Strictly observe the effluent disposal laws of your local authority when disposing of condensate.

Make sure to investigate the code requirements to ensure compliance prior to operating the compressor. The owner, lessor, or operator of this compressor is hereby notified and forewarned that any failure to observe these safety precautions may result in injury, death and/or property damage.

Installation Instructions

Inspection:

Check for any damage that may have occurred during transit, paying specific attention to cracks in the flywheel. Ensure the flywheel turns freely by hand.

Location:

Select a clean, dry, and lit location. In cold climates the compressor should be installed in a heated building. Insulate cold water or other low temperature pipes that pass overhead to avoid the possible collection and dripping of condensate onto the compressor and motor, which could cause rusting and/or short the motor. Do not install compressor in a boiler room, paint spray room, or area where sandblasting will be conducted. If air in the area where the compressor is to be installed is acid-laden or dust-laden the compressor intake should be piped outside. This intake pipe should be increased one pipe size for every twenty (20) feet of run and the intake filters should be installed at the end of the pipes with a hood to protect them from the elements.

If the compressor must be located where the motor will be exposed to appreciable quantities of water, oil, dirt, acid, or alkaline fumes the motor must have an enclosure with a NEMA code dedicated for those conditions to avoid rapid deterioration.

• Bolt the unit securely and evenly to a level base, using shims if required.

• Allow sufficient space around compressor so that it is accessible from all sides for maintenance.

• Mount the unit with pulley side facing toward the wall, but at least six (6) inches from it.

Starting:

1. If the compressor is shipped without oil in the crankcase, before starting, fill crankcase to the high-level mark on the sight glass with 30W ISO100 non-detergent air compressor oil.

AMBIENT OR ROOM TEMP. °F	VISCOSITY AT 100° F S.S.U.	FLASH POINT °F (Min.)	POUR POINT °F (Min.)	CARBON RESIDUE °/o (Max.)	PREFERRED BASE
55 to 120	490 to 600	430	• 20	15	Naphthenic
32 to 55	290 to 350	390	* 5	10	Naphthenic
0 to 32	160 to 230	350	-10	.05	Naphthenic
Above 120 or below 0	CONSULT FACTORY				

2. For operation in damp or humid conditions, the addition of rust inhibitor is recommended.
3. Rotate the flywheel by hand for a few revolutions to make sure all parts are free and in running condition.
4. Check the tension of the belts (1/2" of travel in either direction or 1" total is recommended).
5. Remove tools, rags, and other objects from the vicinity of the compressor.
6. Never put hands or tools on the belts of idle units unless the main power is disconnected and locked.
7. Note the direction of the arrow stamped onto the flywheel and be sure the direction of rotation is correct when the machine is started. Correct direction is counterclockwise when facing the flywheel. Air should be drawn through the intercooler onto the cylinders for maximum cooling.

Maintenance

To obtain reliable and satisfactory service, this unit requires a consistent preventative maintenance program. Maintenance schedule pages should be used to aid in keeping proper records.

General:

1. Check your compressor regularly!
2. Check the entire system for air leakage around fittings, connections, and gaskets, using a soap and water solution.
3. Remove rust and oil soiling.
4. Check fastener tightness by using torque wrench to the corresponding values within the full operations manual.

Compressor Oil:

- Check the oil level every week and top off if necessary. Fill the crankcase with the recommended oil until the sight glass is ¾ full.
- It is recommended to use the same brand of oil every time oil is added to the compressor. Do not mix brands, types, or weights of oil.
- Compressors are filled with break-in lubricant. This is an ISO non-detergent industrial lubricant with rust and oxidation inhibitors specifically formulated for reciprocating compressors.
- Normal break-in period is 25 hours. After which, the compressor oil needs to be drained and replaced with non-detergent air compressor oil.
- Compressors must run for a 25-hour break-in period, using 30W ISO100 non-detergent air compressor oil.
- After 25 hours, thoroughly drain the existing oil from crankcase and replace with fresh oil.
- Run compressor for 200 hours. Thoroughly drain and replace again with fresh oil.
- For the first 500 hours of compressor operation, a careful and regular check of the oil level should be made. Always maintain full oil level.
- After the first 500 hours the compressor is now ready to run for extended periods before the next oil change is required. Always maintain full oil level in between changes.
- Frequency Of Oil Changes:
    - Change oil every 3000 operating hours.
    - For constant run applications in daily use or units subjected to extremely heavy use, change oil monthly.

Air Filter:

- Check and clean air filter every month, making sure the filter is free from debris and functioning properly.
- Replace filter element every 1500 hours or every year, whichever occurs first.

Maintenance Intervals:

Check and record each maintenance task in the table below.

Maintenance work	Maintenance intervals dependent on usage		
	either after	or	
	Operating hours	weekly / monthly	yearly
Check oil level and top up, if necessary		weekly	
Check suction filter and clean, if necessary	500	monthly	
Replace suction filter cartridge	2000		X
Check safety valve	2000		X
Check cooler for soiling and clean, if necessary	500	monthly	
Change oil *	1.000		every 1 years
Check V-belt for damage and replace, if necessary	2.000		X

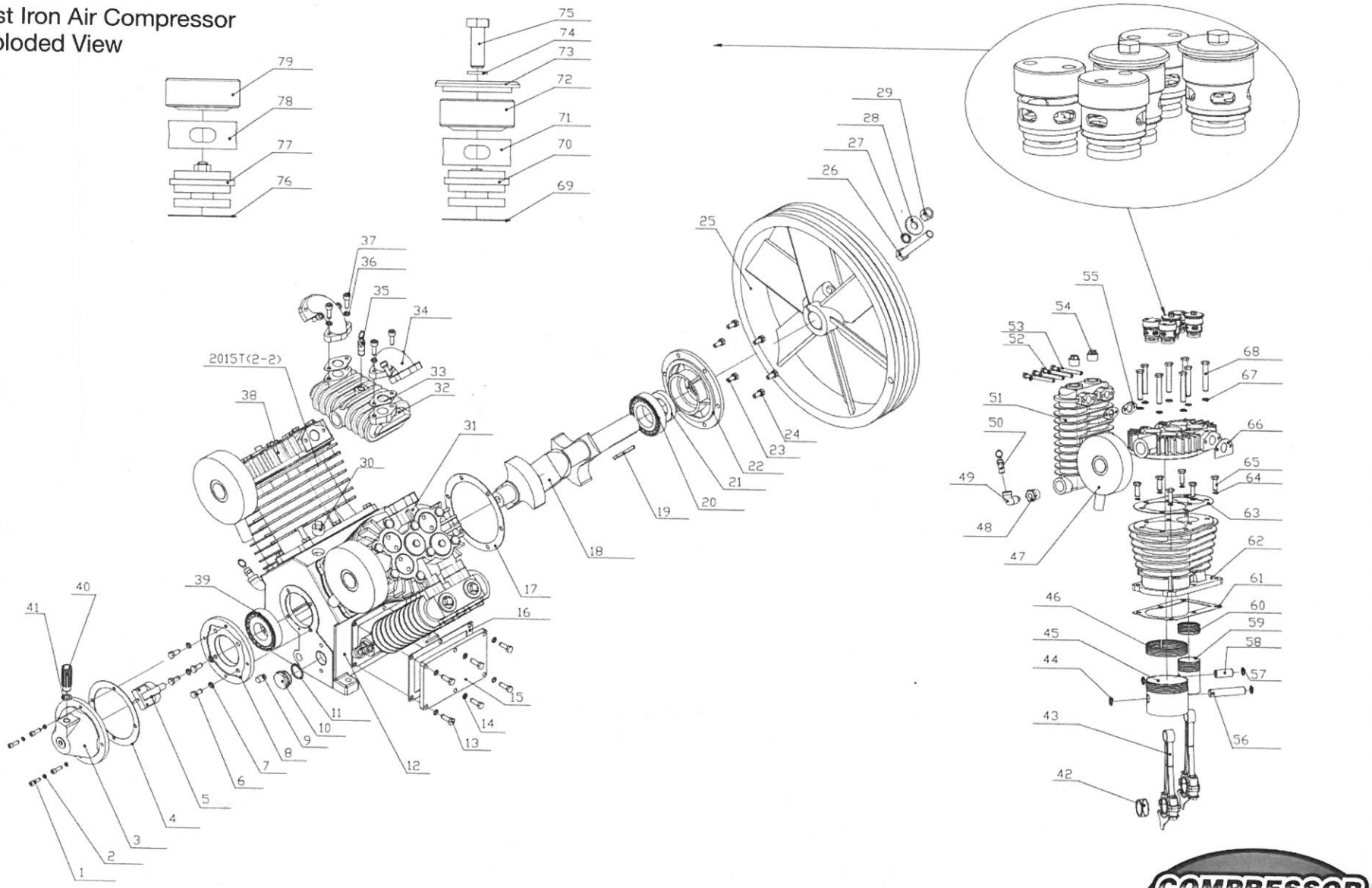
Parts List of CS2105T

No.	Parts Code	Parts Desription	Qty
1	CS2105001	Bolt M6*20	1
2	CS2105002	Spring Washer φ6	1
3	CS2105003	Cover	1
4	CS2105004	Flange Gasket	1
5	CS2105005	Heavy Hammer	1
6	CS2105006	Bolt M8*20	4
7	CS2105007	Spring Washer φ8	4
8	CS2105008	Connection Flange	1
9	CS2105009	Oil Drain Plug	1
10	CS2105010	Oil Level Sight Glass	1
11	CS2105011	Oil Level Sight Glass Washer	1
12	CS2105012	Crankcase	1
13	CS2105013	Blot M8*25	12
14	CS2105014	Flat Washer	12
15	CS2105015	Side Cover	2
16	CS2105016	Side Cover Gasket	2
17	CS2105017	Front Cover Gasket	1
18	CS2105018	Crankshaft	1
19	CS2105019	Key	1
20	CS2105020	Bearing 32208	1
21	CS2105021	Oil Seal 40*65*12	1
22	CS2105022	Front Cover	1
23	CS2105023	Bolt M8*20	6
24	CS2105024	Spring Washer	6
25	CS2105025	Flywheel	1
26	CS2105026	Bolt M16/120	1
27	CS2105027	Spring Washer	1
28	CS2105028	Flat Washer	1
29	CS2105029	Nut M16	1
30	CS2105030	Oil Filling Plug	1
31	CS2105031	Left Cylinder Cover	1
32	CS2105032	Cooler	1
33	CS2105033	Gasket	2
34	CS2105034	Elbow	2
35	CS2105035	Safety Valve	1
36	CS2105036	Spring Washer	8
37	CS2105037	Bolt M8*25	8
38	CS2105038	Right Cylinder Cover	1
39	CS2105039	Bearing 30307	1
40	CS2105040	Breath Pipe	1
41	CS2105041	Breath Pipe Washer	1
42	CS2105042	Bearing Bush	4
43	CS2105043	Connecting Rod	4
44	CS2105044	Circlip	4
45	CS2105045	Low Pressure Piston	2
46	CS2105046	Low Pressure Piston Ring	2
47	CS2105047	Air Filter	2
48	CS2105048	Exhaust Nut	2

No.	Parts Code	Parts Desription	Qty
49	CS2105049	Elbow	2
50	CS2105050	Safety Valve	2
51	CS2105051	Cooler	1
52	CS2105052	Flat Washer	8
53	CS2105053	Bolt M8*90	8
54	CS2105054	Plug Srew	6
55	CS2105055	Gasket	4
56	CS2105056	Low Pressure Piston Pin	2
57	CS2105057	Circlip	4
58	CS2105058	High Pressure Piston Pin	2
59	CS2105059	High Pressure Piston	2
60	CS2105060	High Pressure Piston Ring	2
61	CS2105061	Gasket	2
62	CS2105062	Cyliner	2
63	CS2105063	Cylinder Cover Gasket	2
64	CS2105064	Spring Washer	12
65	CS2105065	Bolt M10*30	12
66	CS2105066	Gasket	2
67	CS2105067	Spring Washer	16
68	CS2105068	Bolt M12*70	16
69	CS2105069	Copper Washer	6
70	CS2105070	Inlet Valve Seat	6
71	CS2105071	Locating Ring	6
72	CS2105072	Three-Holes Retainer	6
73	CS2105073	Valve Cover	6
74	CS2105074	Flat Washer	6
75	CS2105075	Blot M8*25	6
76	CS2105076	Copper Washer	4
77	CS2105077	Valve Seat	4
78	CS2105078	Locating Ring	4
79	CS2105079	Two-Holes Retainer	4

CS2105T

Cast Iron Air Compressor
Exploded View



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