

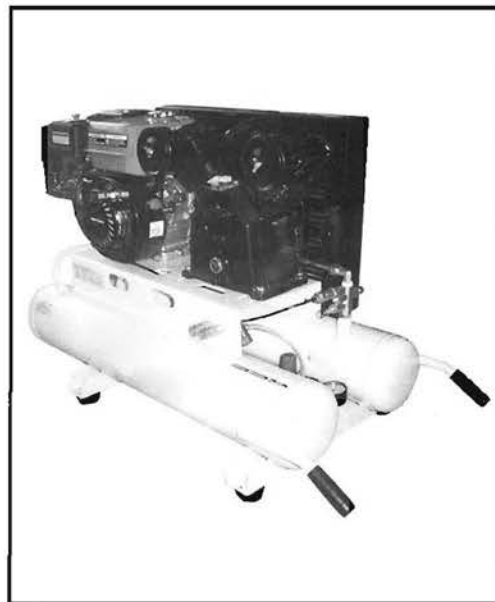
# **AIR COMPRESSOR**

## **OWNER' S MANUAL**

### **MODEL: HD5510TH**



*Technology Corporation of America*



Heavy Duty Power System Technology  
Corporation of America  
Phone #: 208-949-1121

# SPECIFICATIONS

Tank W/One Regulator, Two Couplers & Two Gauges  
7.48 CFM At 40 PSI/6.38 CFM At 90 PSI  
Maximum Pressure: 115 PSI  
Oil Lubrication For Long Life  
Belt Drive Compressor Pump  
Engine power



## WARNING:

Always wear approved protective eyewear when using tools.  
Read and observe all safety rules included in your tool owner's manual.

# SAFETY PRECAUTIONS

## Read all instructions before using this product

Please familiarize yourself with the following information to prevent damage to your compressor and injury to the operator, property damage, or death.

### Tank safety valve

- This valve is factory installed to prevent the air receiver from damage should a malfunction occur in the compressor pump.
- It is factory set at a specific limit for your particular model and adjustment and should never be tampered with adjustment by user will automatically void warranty.

### Compressor pump

- Air compressors get hot while in operation. Never touch the engine, discharge tubing, or compressor pump while in operation.
- The compressor operates automatically while starting.

### Compressed air caution

- Compressors air from the unit may contain carbon monoxide. Air produced is not suitable for breathing purposes.
- Always use a respirator when spraying paint or chemicals.
- Always wear safety glasses or goggles when spraying air.

### Air receiver

- Over pressurizing the air receiver could cause an explosion or rupture. To protect from over pressurizing a factory preset safety value is included. Do not remove, make adjustments or substitutions for this valve.
- Occasionally pull the ring on the valve to make sure that the valve operates freely. If the valve does not operate freely, it must be replaced. Never weld to, drill into, or change the air receiver in any way.
- If any of the above conditions are changed or tampered with this will result in voiding of the manufacturer's warranty. Be advised that any replacement parts should be purchased with the same specification as the original equipment. Please contact your authorized dealer for replacement parts or specifications.

### Others

- Do not smoke while operating the air compressor. To avoid the ignition of a fire or explosion, never spray where sparks or flame is present.
- Keep the compressor away from children and those who are unfamiliar with the unit operation.

# INSTALLATION AND OPERATING INSTRUCTIONS

## General information

Depending on the C.F.M. draw of the tools being operated, your new air compressor can be used for operating paint sprayers, air tools, grease guns, airbrushes, caulking guns, sandblasters, inflating tires and plastic toys, etc. An air pressure regulator is usually necessary for most of these applications.

## General description of operation

To compress air, the pistons move up down in the cylinder. On the down stroke, air is drawn in through the valve inlet. The discharge valve remains closed. On the upstroke of the piston, air is compressed. The inlet valve closes and compressed air is forced out through the discharge valve, through the check valve and into air receiver. Working air is not available until the compressor has raised the air receiver pressure above that required at the air service connection. The air inlet filter openings must be kept clear of obstructions, which could reduce air delivery of the compressor.

## Installation and location

Locate the compressor in a clean, dry and well-ventilated area. The compressor should be located 12 to 18 inches from a wall or any other obstruction that would interfere with the air flow through the fan blade belt wheel. Place the compressor on a firm level surface. The compressor is designed with heat dissipation fins that allow for proper cooling. Keep the fins and other parts that collect dust or dirt clean. A clean compressor runs cooler and provides longer service. Do not place rags, containers, or other material on top of the compressor.

## Assembly

- 1.Remove air filter from plastic bag and screw it into the thread hole. be sure to always clean air filter before and after each use.
- 2.Put wheel and rubber foot on.
- 3.Put handle on.

## COMPRESSOR LUBRICATION

Note. Check the oil quantity and quality before operating the compressor. Do not add or change oil while the compressor is in operation. Use only SAE20 or SAE30 weight non-detergent oil.

### Compressor with oil level sight glass

- 1.Sit air compressor on level surface. The oil level should be at the red dot on the oil level sight glass.
- 2.If oil level is low, remove oil fill plug, add enough oil to bring level to the red dot in the oil level sight glass.
- 3.Replace oil fill plug before starting compressor.

### Draining the oil

- 1.Remove the oil drain plug. Allow oil to drain completely.
- 2.Replace the oil drain plug (we recommend the use of a sealing compound or teflon tape to avoid leakage).
- 3.Refill with the recommended oil to the red dot in the oil level sight glass.

### Starting Compressor

- 1.Make sure the amount of oil is adequate before each use.
- 2.Check all nuts and screws for secured tightness.
- 3.Make sure all pressure and water is released from tank.
- 4.Connect air tool and start the compressor to begin use. Note: Be sure to check manufacturer's maximum pressure rating for air tools and accessories. Compressor outlet pressure must be regulated to never exceed the maximum pressure rating of the tool.
- 5.Use the regulator knob to control the amount of air pressure for the attached air tool. Turn the knob clockwise to increase air pressure and counter-clockwise to reduce air pressure.
- 6.To enable the best air pressure release and avoid air leakage, use teflon tape to wrap around hose and coupler thread.

### Air Release

- 1.Turn the engine switch off after each use of the compressor.
- 2.Open drain valve underneath the tank and release all the air and moisture inside.
- 3.The pressure gauge should now fall back to 0 PSI.
- 4.Release all the air from the attached air tool, then disconnect hose from the quick coupler.

## MAINTENANCE

Before doing any maintenance or adjustments to your air compressor, the following safety precautions should be taken:

- Turn off engine working.
- Drain air tank of pressure.

## CHECKLIST

### Daily or before each use

- 1.Check oil level
- 2.Drain condensation from tank
- 3.Check for any unusual noise or vibration
- 4.Be sure all nuts and bolts are tight

### Weekly

- 1.Clean air filter by opening air filter cap. Remove the filter element and clean thoroughly with soap and water. Rinse thoroughly and allow to dry completely before assembly.
- 2.Clean breather holes on oil check dipstick.

### Monthly

- 1.Inspect air system for leaks by applying soapy water to all joints. Tighten those joints if leakage is observed.

### 250 hours or six (6) months (whichever comes first)

- 1.Change compressor oil.
- 2.Replace oil more often if compressor is used near paint spraying operations or in dusty environments.


# PARTS LISTS

For assistance in solving parts problems please refer to the parts and components for our air compressors by number. When a new replacement is needed include the model number of the air compressor, part number and quantity required.

If a new assembly is required, include the model number of the air compressor undergoing repair (according to the nameplate), the part name, part number and quantity required according to the number on the parts diagram.

During the break-in period, nuts and bolts have a tendency to loosen up. After two weeks tighten all nuts and bolts including head bolts. Then check everything once a month to make sure all nuts and bolts stay tight.

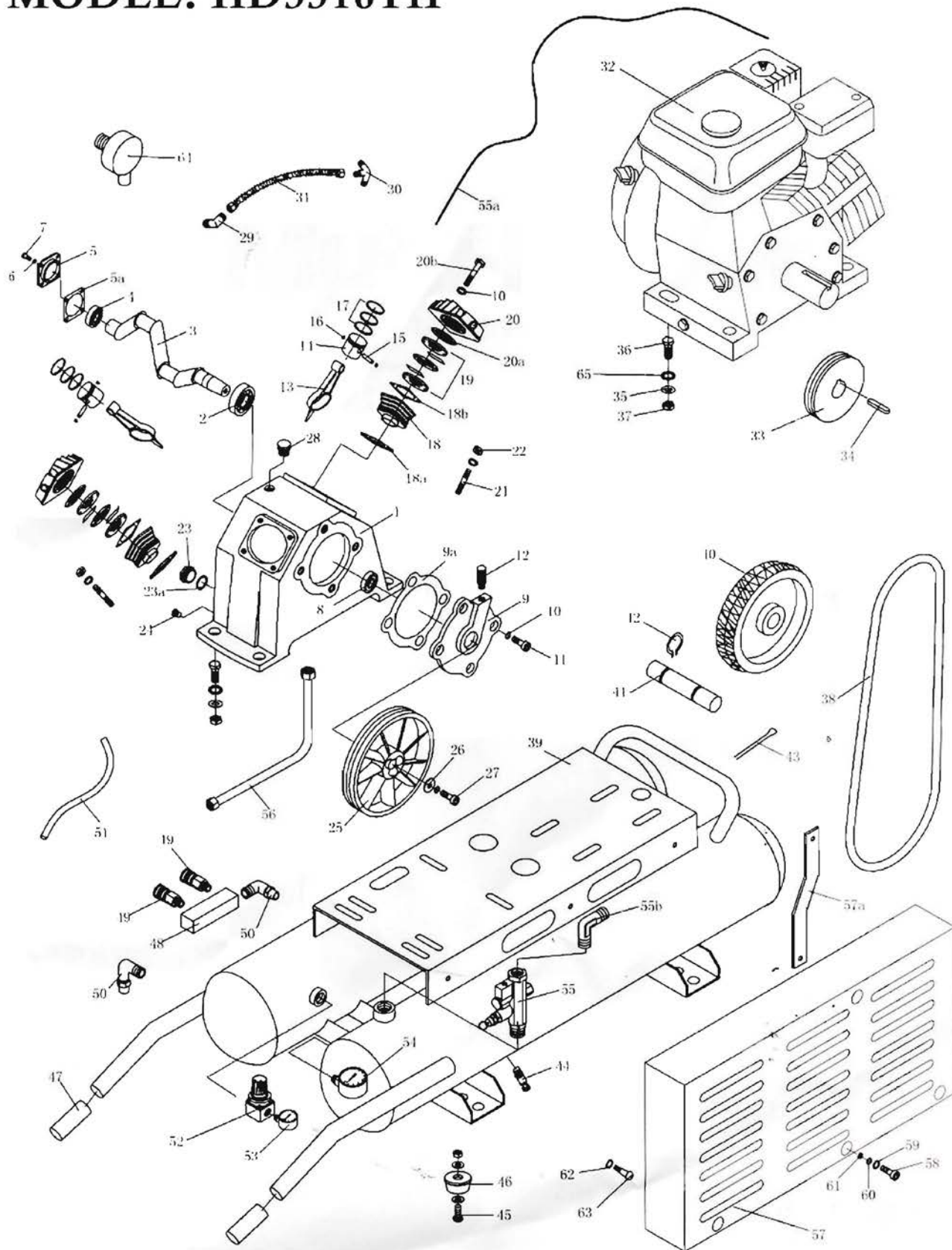
## Troubleshooting chart

Symptom	Possible cause(s)	Corrective action
Excessive noise in operation	1. Loose pulley, flywheel, belt, belt guard, etc 2. Lack of oil in crankcase 3. Compressor floor mounting loose	1. Tighten 2. Check for damage to bearings, replenish oil 3. Shim and tighten
Milky oil in oil reservoir	Water condensing in crankcase due to high humidity	Pipe air intake to less humid air source. Run pump continuously for one hour
Excessive oil consumption or oil in air lines	1. Be sure there is a problem 2. Restricted air intake 3. Wrong oil viscosity 4. Worn piston rings 5. Oil leaks 6. Scored cylinder	1. Diagnose oil contamination problems by testing the discharge air or measuring oil consumption from the crankcase 2. Clean or replace air filter 3. Drain oil, Refill with oil of proper viscosity 4. Replace rings 5. Tighten bolts, replace gaskets or o-rings 6. Replace cylinder
Water in discharge air	Excessive water in tank	Drain tank
Air blowing out of inlet	Broken inlet valve	Replace valve assembly
Insufficient pressure	1. Air demand too high 2. Leaks or restrictions in hoses or piping 3. Slipping belts	1. Limit air usage 2. Check for leaks or restriction in hose or piping 3. Tighten belts
Tank does not hold pressure when compressor is off and shutoff valve is closed	1. Faulty check valve 2. Check all connections and fittings for tightness 3. Check tank for cracks or pin holes	1. Clean or replace faulty valve <b> DANGER Do not disassemble check valve with air pressure in tank</b> 2. Tighten 3. Replace tank, Never repair a damaged tank
Excessive belt wear, (Light dust from start is normal. Worn belts separate at layers)	1. Pulley out of alignment 2. Belts too tight or too loose	1. Realign motor pulley 2. Adjust tension
Tank pressure builds slowly	1. Dirty air filter 2. Blown cylinder head gasket 3. Worn/broken intake/discharge valves 4. Air leaks	1. Clean or replace filter element 2. Install new gasket 3. Install new valve plate assembly 4. Tighten joints
Tank pressure builds up quickly on compressor	Excessive water in tank	Drain tank
Safety valve pops open while compressor is running	1. Wrong pressure setting 2. Defective safety valve	1. Adjust to lower pressure 2. Replace valve

# Parts list for model HD5510TH

Ref. No.	DESCRIPTION	Q'TY	Ref. No.	DESCRIPTION	Q'TY
1	CRANK CASE	1	32	PETROL ENGINE	1
2	FRONT BEARING	1	33	ENGINE PULLEY	1
3	CRANK SHAFT	1	34	KEY	1
4	BACK BEARING	1	35	WASHER	24
5	CRANK CASE COVER	1	36	BOLT	8
5a	GASKET	1	37	NUT	14
6	SPRING WASHER	4	38	V-BELT	1
7	BOLT	4	39	TANK	1
8	OIL SEAL	1	40	TANK WHEEL	1
9	FRONT BRACKET	1	41	AXLE	1
9a	GASKET	1	42	CIRCLIP	2
10	SPRING WASHER	20	43	SPLIT PIN	2
11	BOLT	4	44	DRAIN COCK	2
12	OIL BREATHER	1	45	BOLT	4
13	CONNECTING ROD	2	46	RUBBER FOOT	4
14	PISTON	2	47	HANDLE GRIP	2
15	PISTON PIN	2	48	THREE WAY CONNECTOR	1
16	CIRCLIP	4	49	QUICK COUPLER	2
17	PINSTON RING	2	50	PU HOSE CONNECTOR	2
18	CYLINDER	2	51	PU HOSE	1
18a	GASKET	2	52	REGULATOR	1
18b	GASKET	2	53	PRESSURE GAUGE	1
19	VALVE ASSEMBLY	2	54	PRESSURE GAUGE	1
20	CYLINDER HEAD	2	55	MASTER UNLOADER	1
20a	GASKET	2	55a	STARTER GRIP	1
20b	BOLT	8	55b	ELBOW	1
21	DUAL HEAD BOLT	8	56	EXHAUST PIPE	1
22	NUT	4	57	BELT GUARD	1
23	OIL SIGHT GLASS	1	58	BOLT	3
23a	O-RING	1	59	WASHER	6
24	OIL DRAIN PLUG	1	60	SPRING WASHER	3
25	PULLEY	1	61	NUT	3
26	WASHER	1	62	WASHER	7
27	BOLT	1	63	CROSS HEAD SCREW	7
28	OIL FILL PLUG	1	64	AIR FILTER	2
29	ELBOW	1	65	SPRING WASHER	8
30	THREE WAY CONNECTOR	1			
31	PIPE	1			

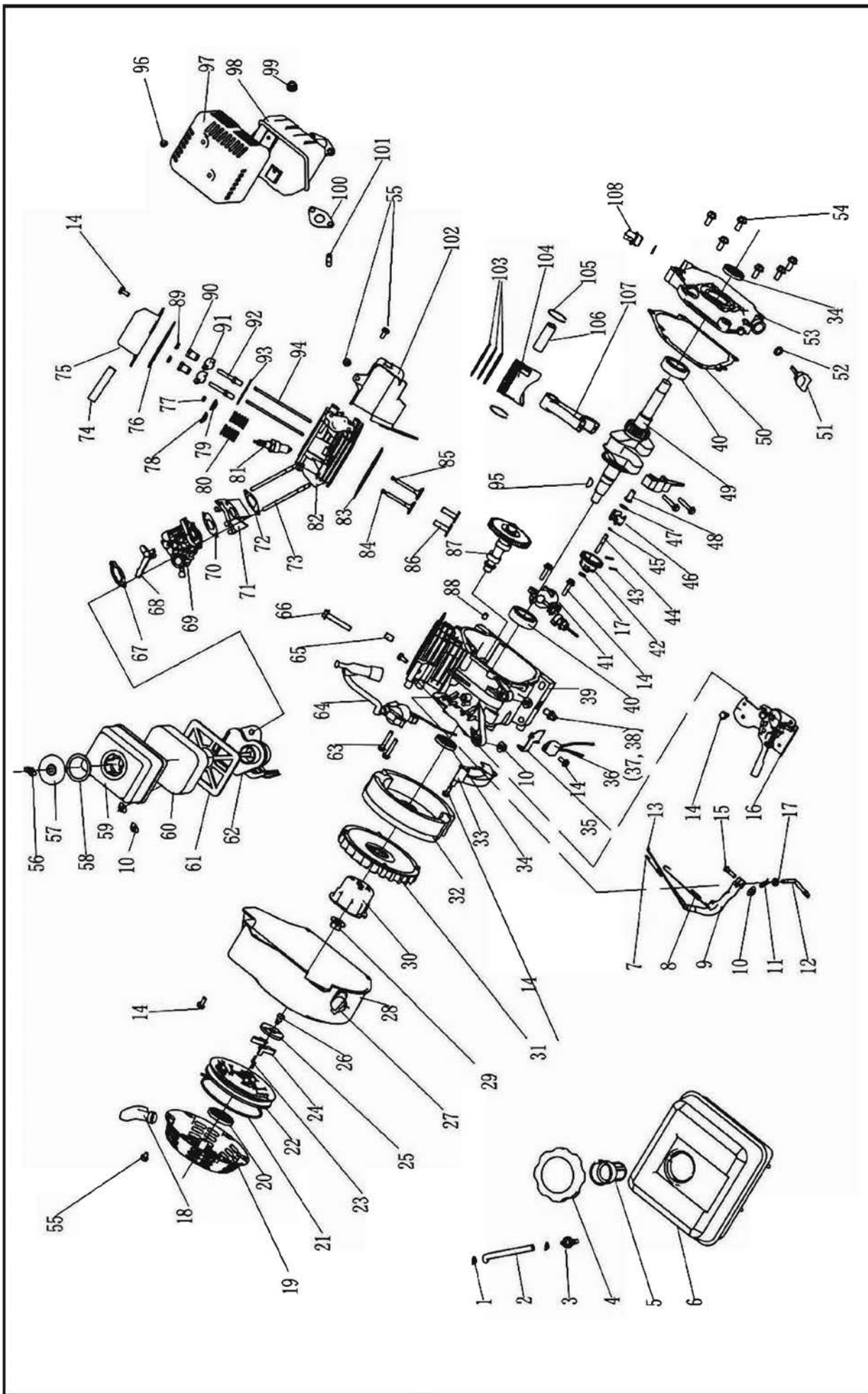
# MODEL: HD5510TH





# ENGINE EXPLODED VIEW

Model HD5510TH-E





# HONDA Engine Parts List

**Model HD5510TH-E**

REF. NO.	PART NO.			DESCRIPTION	QTY.
	Model HD5510TH-E	Model HD5510TH-E	Model HD5510TH-E		
1	RZ168F-I-001	*	*	Fuel hose clip	2
2	RZ168F-I-002	*	*	Fuel hose	1
3	RZ168F-I-003	*	*	Fuel outlet joint	1
4	RZ168F-I-004	*	*	Fuel tank cap	1
5	RZ168F-I-005	*	*	Fuel filter	1
6	RZ168F-I-006	*	*	Fuel tank	1
7	RZ168F-I-007	*	*	Carburetor spring	1
8	RZ168F-I-008	*	*	Governing spring	1
9	RZ168F-I-009	*	*	Governor arm	1
10				Nut M6	5
11	RZ168F-I-010	*	*	Clip	1
12	RZ168F-I-011	*	*	Governor shaft	1
13	RZ168F-I-012	*	*	Carburetor connecting rod	1
14				Screw M6x12	13
15	RZ168F-I-013	*	*	Governor arm screw	1
16	RZ168F-I-014	*	*	Throttle control rack	1
17	RZ168F-I-015	*	*	Governor shaft washer	2
18	RZ168F-I-016	*	*	Rope handle	1
19	RZ168F-I-017	*	*	Starter case	1
20	RZ168F-I-018	*	*	Starter spring	1
21	RZ168F-I-019	*	*	Rope	1
22	RZ168F-I-020	*	*	Drum sheave	1
23	RZ168F-I-021	*	*	Spring	2
24	RZ168F-I-022	*	*	Drive pawl	2
25	RZ168F-I-023	*	*	Pawl guide	1
26	RZ168F-I-024	*	*	Setting screw	1
27	RZ168F-I-025	*	*	Engine switch	1
28	RZ168F-I-026	*	*	Fan case	1
29	RZ168F-I-027	*	*	Flywheel nut M14	1
30	RZ168F-I-028	*	*	Starting hub	1
31	RZ168F-I-029	*	*	Cooling fan	1
32	RZ168F-I-030	*	*	Flywheel	1
33	RZ168F-I-031	*	*	Air shroud	1
34	RZ168F-I-032	*	*	Oil seal 22x41.3x6	2
35	RZ168F-I-033	*	*	Diode rack	1
36	RZ168F-I-034	*	*	Diode	1
37	RZ168F-I-035	*	*	Drain plug	2
38	RZ168F-I-036	*	*	Drain plug washer	2
39	RZ168F-I-037	RZ168F-II-001	RZ170F-001	Crankcase	1
40	RZ168F-I-038	*	*	Ball bearing	2
41	RZ168F-I-039	*	*	Oil level sensor	1
42	RZ168F-I-040	*	*	Governing gear	1
43	RZ168F-I-041	*	*	Flyweight pin	2
44	RZ168F-I-042	*	*	Governing gear shaft	1
45	RZ168F-I-043	*	*	Governing gear shaft circlip	1
46	RZ168F-I-044	*	*	Flyweight	2
47	RZ168F-I-045	*	*	Washer	1
48	RZ168F-I-046	*	*	Collar	1
49	RZ168F-I-047	RZ168F-II-002	**	Crankshaft assembly	1
50	RZ168F-I-048	*	*	Crankcase gasket	1
51	RZ168F-I-049	*	*	Oil gauge	1
52	RZ168F-I-050	*	*	Oil gauge seal	2
53	RZ168F-I-051	*	*	Crankcase cover	1
54	RZ168F-I-052	*	*	Screw M8x32	6

\* The part number same as Model RZ168F-I      \*\* The part number same as Model RZ168F-II

Please provide following information for ordering parts and maintenance:

. Model number

. Part description, reference and part number as shown in parts list





# HONDA Engine Parts List

**Model HD5510TH-E**

REF. NO.	PART NO.			DESCRIPTION	QTY.
	Model HD5510TH-E	Model HD5510TH-E	Model HD5510TH-E		
55				Screw M6x8	5
56	RZ168F-I-053	*	*	Air cleaner cover nut	1
57	RZ168F-I-054	*	*	Washer	1
58	RZ168F-I-055	*	*	Gasket	1
59	RZ168F-I-056	*	*	Air cleaner cover	1
60	RZ168F-I-057	*	*	Air cleaner element	1
61	RZ168F-I-058	*	*	Element rack	1
62	RZ168F-I-059	*	*	Air cleaner housing	1
63				Screw M6x25	3
64	RZ168F-I-060	*	*	T. C. I. Unit	1
65	RZ168F-I-061	*	*	Dowel pin	2
66				Cylinder screw M8x55	4
67	RZ168F-I-062	*	*	Carburetor washer	1
68	RZ168F-I-063	*	*	Choke level	1
69	RZ168F-I-064	RZ168F-II-003	**	Carburetor	1
70	RZ168F-I-065	*	*	Carburetor gasket	1
71	RZ168F-I-066	*	*	Carburetor connector	1
72	RZ168F-I-067	*	*	Connector gasket	1
73	RZ168F-I-068	*	*	Carburetor bolt M6x113	2
74	RZ168F-I-069	*	*	Breather tube	1
75	RZ168F-I-070	*	*	Cylinder head cover	1
76	RZ168F-I-071	*	*	Cylinder head cover gasket	1
77	RZ168F-I-072	*	*	Exhaust valve cap	1
78	RZ168F-I-073	*	*	Intake valve retainer	1
79	RZ168F-I-074	*	*	Exhaust valve Retainer	1
80	RZ168F-I-075	*	*	Valve spring	2
81	RZ168F-I-076	*	*	Spark plug	1
82	RZ168F-I-077	RZ168F-II-004	**	Cylinder head	1
83	RZ168F-I-078	RZ168F-II-005	RZ170F-002	Cylinder gasket	1
84	RZ168F-I-079	*	*	Intake valve	1
85	RZ168F-I-080	*	*	Exhaust valve	1
86	RZ168F-I-081	*	*	Valve lifter	2
87	RZ168F-I-082	RZ168F-II-006	**	Camshaft assembly	1
88	RZ168F-I-083	*	*	Dowel pin	2
89	RZ168F-I-084	*	*	Valve clearance adjusting nut	2
90	RZ168F-I-085	*	*	Rocker arm seat	2
91	RZ168F-I-086	*	*	Rocker arm	2
92	RZ168F-I-087	*	*	Rocker arm bolt	2
93	RZ168F-I-089	*	*	Push rod guide	1
94	RZ168F-I-090	*	*	Push rod	2
95	RZ168F-I-091	*	*	Crankshaft key	1
96	RZ168F-I-092	*	*	Screw M5x8	4
97	RZ168F-I-093	*	*	Muffler protector	1
98	RZ168F-I-094	*	*	Muffler	1
99	RZ168F-I-095	*	*	Nut M8	2
100	RZ168F-I-096	*	*	Exhaust gasket	1
101	RZ168F-I-097	*	*	Exhaust bolt	2
102	RZ168F-I-098	*	*	Air shroud	1
103	RZ168F-I-099	*	RZ170F-003	Piston ring set	1
104	RZ168F-I-100	RZ168F-II-007	RZ170F-004	Piston	1
105	RZ168F-I-101	*	*	Piston pin circlip	2
106	RZ168F-I-102	*	RZ170F-005	Piston pin	1
107	RZ168F-I-103	*	*	Connecting rod assembly	1
108	RZ168F-I-104	*	*	Oil filling plug	1

\* The part number same as Model RZ168F-I      \*\* The part number same as Model RZ168F-II

Please provide following information for ordering parts and maintenance :

. Model number

. Part description ,reference and part number as shown in parts list