

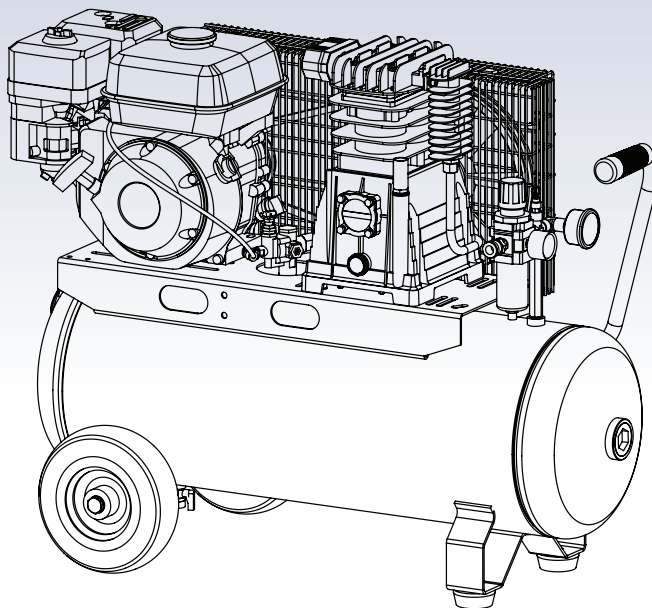


INDUSTRIAL SERIES
AIR COMPRESSOR

PETROL BELT DRIVE AIR COMPRESSOR

OPERATOR'S MANUAL

POWERED by
HONDA



TM352-90150
TM352-13270
TM352-55060

Ver: 1.0

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LIMITED WARRANTY

Industrial Tool & Machinery Sales (hereinafter referred to as ITMS) will, within twelve (12) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship.

This warranty is void if the item has been damaged by accident, neglect, improper service or other causes not arising out of defects in materials or workmanship. This warranty does not apply to machines and/or components which have been altered, changed, or modified in any way, or subjected to overloading or use beyond recommended capacities and specifications. Worn componentry due to normal wear and tear is not a warranty claim. Goods returned defective shall be returned prepaid freight to ITMS or agreed repair agent, which shall be the buyer's sole and exclusive remedy for defective goods. ITMS accepts no additional liability pursuant to this guarantee for the costs of travelling or transportation of the product or parts to and from ITMS or the service agent or dealer, such costs are not included in this warranty.

Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

THE MANUFACTURER RESERVES THE RIGHT TO MAKE IMPROVEMENTS AND MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE.

PRODUCTS IMPORTED AND DISTRIBUTED NATIONALLY BY:



INDUSTRIAL TOOL & MACHINERY SALES
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! SAFETY INFORMATION

Please read and understand this entire manual before attempting to operate the product.

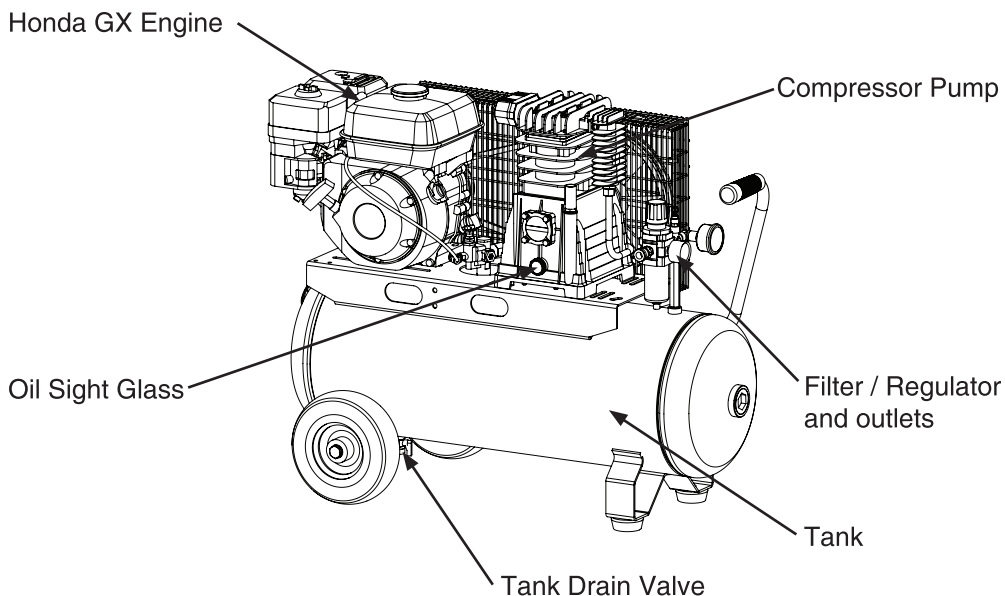
Improper operation or maintenance of this product could result in serious injury and property damage. Read and understand all warnings and operation instructions before using this equipment. When using air tools, basic safety precautions should always be followed to reduce the risk of personal injury.

ITM air compressors are manufactured to AS1210 Standards.

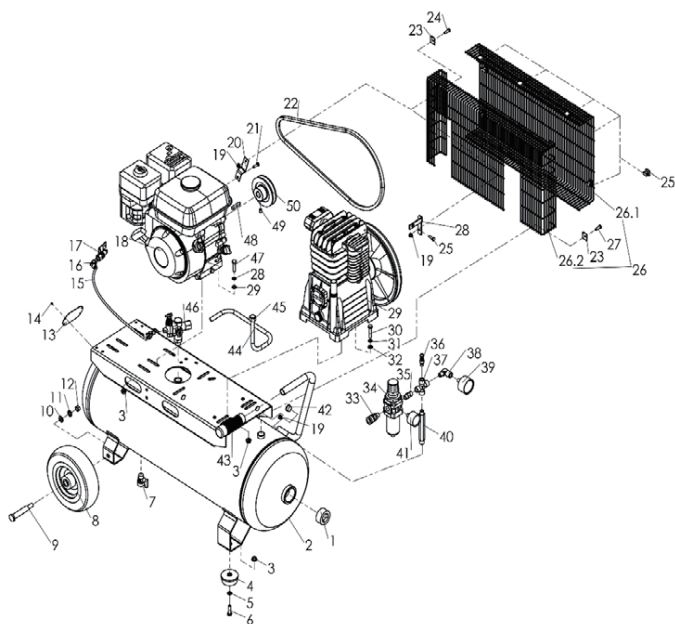
This air receiver is registered with WorkSafe Australia to comply with plant registration regulations in Australia.

PRODUCT SPECIFICATIONS

COMPONENT		SPECIFICATIONS		
Product No.	TM352-55060	TM352-90150	TM352-13270	
Engine	Honda GX160	Honda GX270	Honda GX390	
Input Power	5.5HP / 4.1KW	9HP / 6.3 KW	13HP / 8.7 KW	
Fuel Tank Capacity	3.1 Litre Unleaded	5.3 Litre Unleaded	6.1 Litre Unleaded	
Fuel Consumption	1.4 Ltr/Hr @ 3,600rpm	2.4 Ltr/Hr @ 3,600rpm	3.5 Ltr/Hr @ 3,600rpm	
Tank Capacity	60 Litre	150 Litre	270 Litre	
Max Pressure	145 psi (10 Bar)	145psi (10 Bar)	145psi (10 Bar)	
Free Air Delivery (FAD)	355 Ltr/min	635 L/min	840 L/min	
Pump Type	Belt Drive	Belt drive	Belt Drive	



PARTS DIAGRAM - MAIN ASSEMBLY

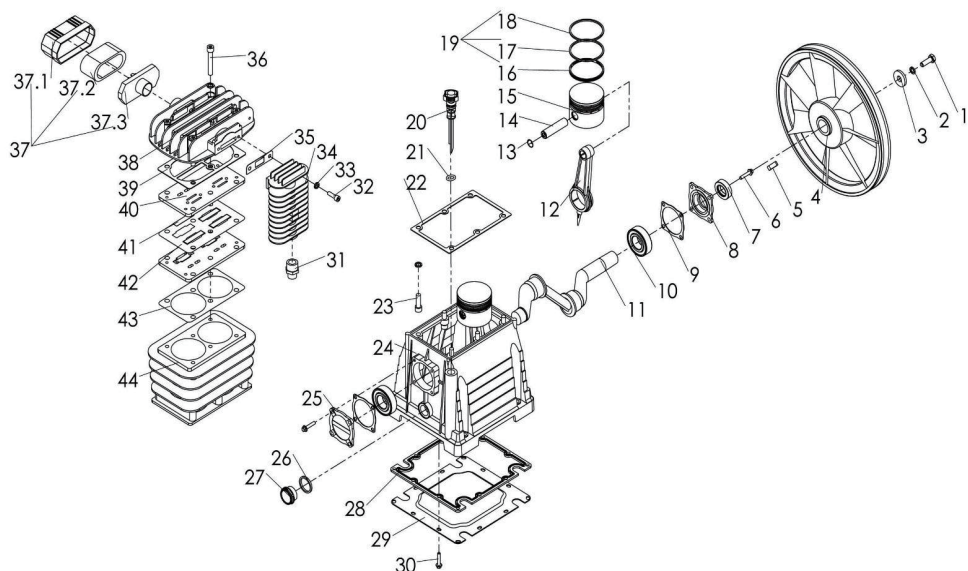


PARTS LIST

FOR: TM352-55060

No.	Q.ty	Part Name	No.	Q.ty	Part Name
1	2	Plug,Socket head	26.1	1	Belt guard (RR)
2	1	Air Tank	26.2	1	Belt guard (FR)
3	6	Hex.Nut	27	2	Hex.Bolt
4	2	Rubber foot	28	1	Guard bracket
5	2	PL.Washer	29	1	Pump Ass'y
6	2	Hex.Bolt	30	2	Hex.Bolt
7	1	Ball valve	31	8	Sp. Washer
8	2	wheel	32	8	PL. Washer
9	2	Axle	33	1	Quick Coupler
10	2	PL.Washer	34	1	Pressure Regulator
11	2	SP.Washer	35	1	Nipple
12	2	Hex.Nut	36	1	Safety valve
13	1	Tank name plate	37	1	4-way manifold nipple
14	4	rivet	38	1	Elbow
15	1	Discharge tube	39	1	Pressure Gauge
16	2	Elbow fitting	40	1	Nipple
17	1	Throttle valve	41	1	Pressure Gauge
18	1	petrol motor	42	1	Grip, Handle
19	7	Hex.Nut	43	1	Grip, Handle
20	1	Guard bracket	44	1	Copper Tube
21	1	Hex.Bolt	45	2	Sleeve nut
22	1	V-Belt	46	1	Combination valves
23	6	Steel clip	47	4	Hex.Bolt
24	2	Hex.Bolt	48	1	Key
25	7	Plastic clip	49	1	Set screw
26	1	Belt guard Ass'y	50	1	Motor pulley

PARTS DIAGRAM - PUMP

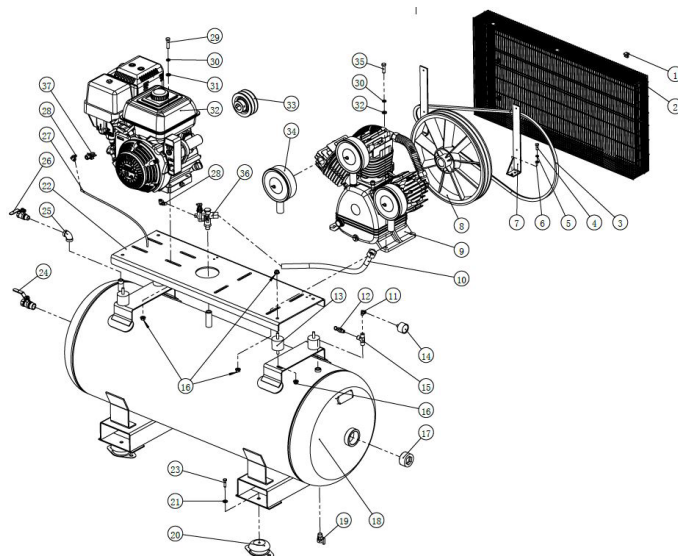


PARTS LIST

FOR: TM352-55060

1	Hex.Bolt	24	Crankcase
2	SP.Washer	25	Bearing cover
3	PL.Washer	26	Gasket
4	Flywheel	27	Oil Sight Glass
5	Key	28	Seal ring
6	Hex.Bolt	29	Lower Cover
7	Oil seal	30	Hex.Bolt
8	Front Support	31	Nipple
9	Gasket	32	Hex.Bolt
10	Bearing	33	SP.Washer
11	Crankshaft	34	Radiator
12	Connecting rod	35	Gasket Radiator
13	Circlip	36	Hex.Socket Bolt
14	Piston pin	37	Air filter Ass'Y
15	Piston	37.1	Case
16	Oil Ring	37.2	Element
17	Scraping ring	37.3	case
18	Compression Ring	38	Cylinder head
19	Piston ring kit	39	Gasket, Cylinder head
20	Breather	40	Valve plate
21	O-Ring	41	Valve Blade
22	Seal ring	42	Gasket, Valve
23	Hex.Socket Bolt	43	Gasket, Valve
		44	Cylinder

PARTS DIAGRAM - MAIN ASSEMBLY

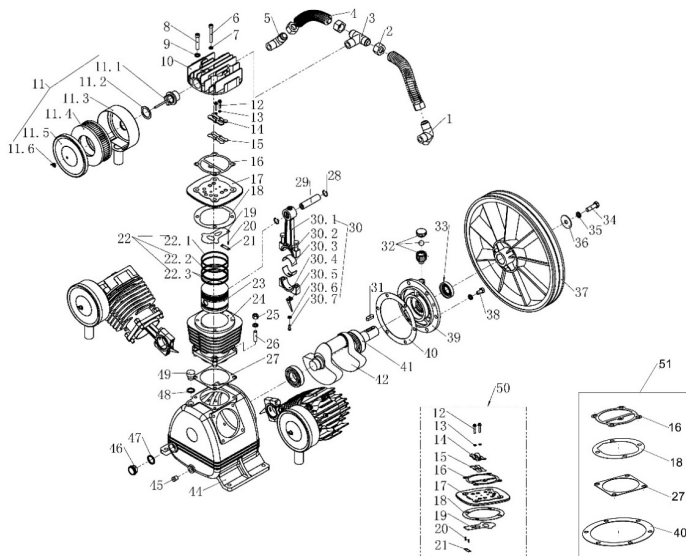


PARTS LIST

FOR: TM352-13270

No.	Qty.	Part Name	No.	Qty.	Part Name
1	10	Belt guard clip	29	4	Hex.Bolt
2	1	Belt guard	30	8	Spring washer
3	1	Belt	31	12	Plate washer
4	4	Hex.Bolt	32	1	Engine
5	4	Spring washer	33	1	Motor pulley
6	4	Plate washer	34	3	Air filter accessory
7	2	Bracket	35	4	Hex.Bolt
8	1	Fly wheel	36	1	Throttle valve
9	1	Pump	37	1	Fuel throttle valve
10	1	Metallic hose			
11	1	Elbow			
12	1	Safety valve			
13	4	Rubber foot			
14	1	Pressure guage			
15	1	3-way nipple			
16	16	Hex.Nut			
17	1	Socket head bolt			
18	1	Tank			
19	1	Ball valve			
20	4	Mounting pad			
21	4	Plate washer			
22	1	Base plate			
23	4	Hex.Bolt			
24	1	Ball valve			
25	1	Elbow			
26	1	Ball valve			
27	1	Discharge tube(Nylon tube)			
28	2	Quick coupling			

PARTS DIAGRAM - PUMP

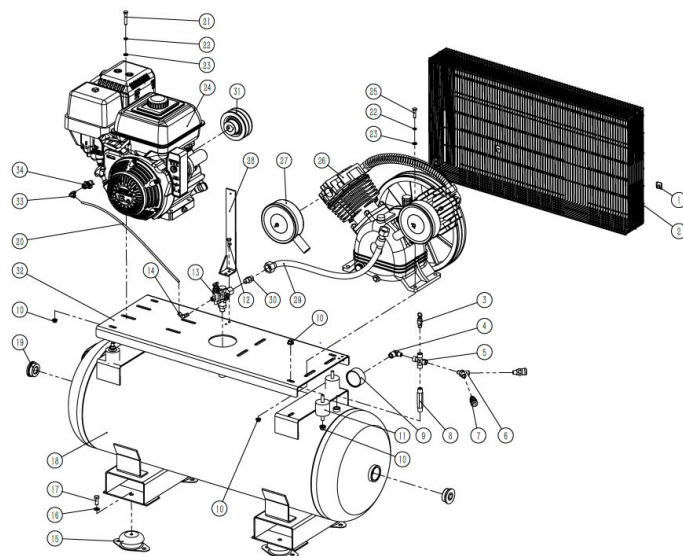


PARTS LIST

FOR: TM352-13270

No.	Qty.	Part Name	No.	Qty.	Part Name
1	1	3-Way manifold nipple	27	3	Cylinder Gasket
2	4	Sleeve Nut	28	6	Cirdip
3	1	3-Way manifold nipple	29	3	Piston Pin
4	2	Copper Tube	30	3	Connecting rod
5	1	2-Way manifold nipple	30.1	3	Conrod Part 1
6	3	Hex.Socket bolt	30.2	6	Hex.Bolt
7	3	SP.Washer	30.3	3	Bearing Bushing
8	12	Hex.Socket bolt	30.4	3	Conrod Part 2
9	30	Sp.Washer	30.5	3	Oil Finger
10	3	Cylinder Head	30.6	3	SP.Washer
11	3	Air filter Ass'Y	30.7	3	Hex.Bolt
11.1	3	Screw	31	1	Key
11.2	3	O ring	32	1	Breather
11.3	3	case	33	1	Oil Seal
11.4	3	Element	34	1	Hex.Bolt
11.5	3	case	35	6	SP.Washer
11.6	3	Nut, Butterfly	36	6	PL.Washer
12	6	Hex.Bolt	37	1	Fly wheel
13	6	SP.Washer	38	6	Hex.Bolt
14	3	Valve holder	39	1	Front cover
15	3	Valve blade	40	1	Gasket Front cover
16	3	Gasket ,Cylinder Cover	41	1	Bearing 6307
17	3	Blade,Valve	42	1	Crankshaft
18	3	Gasket Valve	43	1	Bearing
19	3	Blade,Valve	44	1	Crankcase
20	6	Locating pin	45	1	Plug
21	3	Locating plate	46	1	Oil Sight Glass
22	3	Piston ring Kit	47	1	O-Ring
22.1	3	Compression Ring	48	1	O-Ring
22.2	3	Scraping Ring	49	1	Oil Cap
22.3	6	Oil Ring	50	3	Valve plate kit
23	3	Piston	51	1	Gasket kit
24	3	Cylinder			
25	12	Hex.Nut			
26	12	Stud Bolt			

PARTS DIAGRAM - MAIN ASSEMBLY

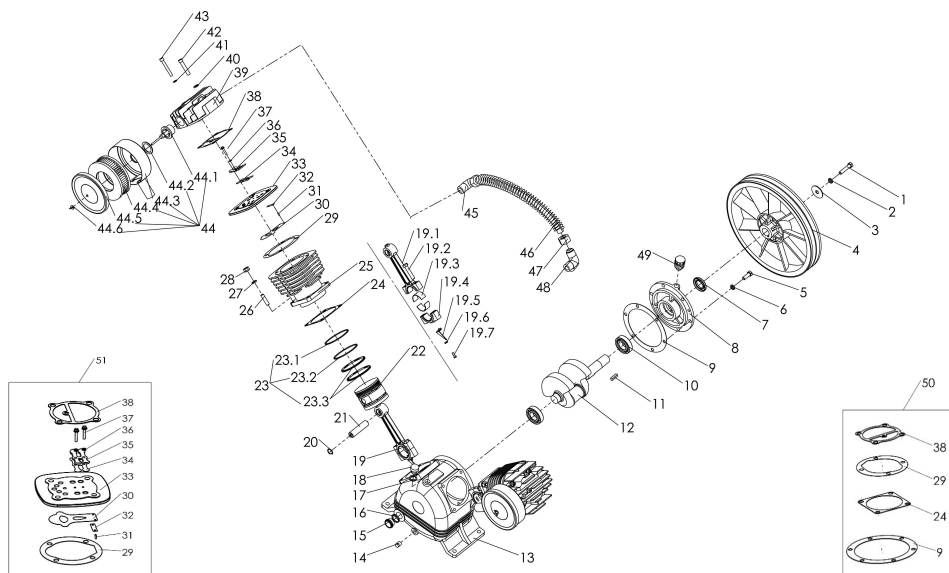


PARTS LIST

FOR: TM352-90150

No.	Qty.	Part Name	No.	Qty.	Part Name
1	8	Belt guard clip	29	1	Metallic hose
2	1	Belt guard	30	1	Connector
3	1	Safety valve	31	1	Motor pulley
4	1	Elbow	32	1	Base plate
5	1	4-way nipple	33	1	Quick coupling
6	1	3-way nipple	34	1	Relief valve
7	2	Quick coupling			
8	1	Connector			
9	1	Pressure gauge			
10	16	Hex.Nut			
11	4	Rubber foot			
12	2	Hex.Bolt			
13	1	Throttle valve			
14	1	Connector			
15	4	Mounting pad			
16	4	Plate washer			
17	4	Hex.Bolt			
18	1	Tank			
19	2	Socket head bolt			
20	1	Discharge tube(Nylon tube)			
21	4	Hex.Bolt			
22	8	Spring washer			
23	8	Plate washer			
24	1	Engine			
25	4	Hex.Bolt			
26	1	Pump			
27	2	Air filter accessory			
28	1	Bracket			

PARTS DIAGRAM - PUMP



PARTS LIST

FOR: TM352-90150

No.	Qty.	Part Name	No.	Qty.	Part Name
1	1	Hex.Bolt	26	8	Stud bolt
2	1	SP.Washer	27	8	SP.Washer
3	1	PL.Washer	28	8	Hex.Nut
4	1	Flywheel	29	3	Gasket Valve
5	6	Hex.Bolt	30	2	Valve blade
6	6	SP Washer	31	4	Locking pin
7	1	Oil seal	32	2	Locating plate
8	1	Front cover	33	2	Valve plate
9	1	Gasket	34	2	Valve blade
10	2	Ball bearing 6206	35	2	Valve holder
11	1	Shaft key	36	4	SP.Washer
12	1	Crankshaft	37	4	Hex.Bolt
13	1	Crankcase	38	2	Gasket ,Cylinder Cover
14	1	Plug	39	2	Cylinder head
15	1	Oil sight glass	40	8	SP.Washer
16	1	O ring	41	2	SP.Washer
17	1	O ring	42	8	Hex.Socket bolt
18	1	Oil cap	43	2	Hex.Socket bolt
19	2	Connecting rod	44	2	Air filter Ass'Y
19.1	2	Conrod part 1	44.1	2	Screw,Intake filter
19.2	4	Hex.Bolt	44.2	2	Seal,Intake filter
19.3	2	Bearing Bushing	44.3	2	Filter case
19.4	2	Conrod part 2	44.4	2	Element
19.5	2	Oil finger	44.5	2	Filter Cover
19.6	2	SP.Washer	44.6	2	Nut,Intake filter
19.7	2	Hex.Bolt	45	1	Elbow fitting
20	4	Circlip	46	1	Copper tube
21	2	Piston pin	47	2	Sleeve Nut
22	2	Piston	48	1	3-way manifold nipple
23	3	Piston Ring Kit	49	1	Breather
23.1	2	Compression Ring	50	1	Gasket kit
23.2	2	Scraping Ring	51	1	Valve plate kit
23.3	4	Oil Ring			
24	2	Cylinder gasket			
25	2	Cylinder			

GENERAL SAFETY RULES FOR OPERATION

Before attempting to operate this compressor the following basic safety precautions should always be taken to reduce the risk of fire and personal injury. It is important to read the instruction manual to understand the application, limitations and potential hazards associated with any tool. They are designed for the safety of yourself and others, ensuring a long and trouble free service life from your machine.

Work Area

- a. Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b. Floors should be kept clean and free from rubbish. Special care should be taken if the floor is slippery due to sawdust or wax.
- c. Keep children and bystanders away while operating a compressor. Distractions can cause you to lose control.
- d. Do not use compressor in areas where there is a risk of explosion or fire from combustible materials, flammable liquids, e.g., paint, varnish, petrol etc or flammable gases and dust of an explosive nature.



DANGER



Never operate the compressor in an enclosed area. Engine exhaust contains carbon monoxide. Only operate the compressor outside and away from windows, doors and vents.



WARNING



Gasoline and gasoline vapors are extremely flammable and explosive under certain conditions.

- Always refuel the compressor outdoors, in a well-ventilated area.
- Never remove the fuel cap with the engine running.
- Never refuel the compressor while the engine is running. Always turn engine off and allow the compressor to cool before refueling.
- Only fill fuel tank with gasoline.
- Keep sparks, open flames or other form of ignition (such as match, cigarette, static electric source away when refueling.
- Never overfill the fuel tank. Leave room for fuel to expand. Overfilling the fuel tank can result in a sudden overflow of gasoline and result in spilled gasoline coming in contact with HOT surfaces. Spilled fuel can ignite. If fuel is spilled on the compressor, wipe up any spills immediately. Dispose of rag properly. Allow area of spilled fuel to dry before operating the compressor.
- Wear eye protection while refueling.
- Never use gasoline as a cleaning agent.
- Store any gasoline containers in a well-ventilated area, away from any source of ignition.
- Check for fuel leaks after refueling. Never operate the engine if a fuel leak is discovered.

GENERAL SAFETY RULES FOR OPERATION

Personal Safety

- a. Stay alert, watch what you are doing and use common sense when operating a compressor. Do not use while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating this compressor may result in serious personal injury.
- b. Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- d. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

General

- e. Do not operate the compressor without the motor and pump cowling being correctly fitted.
- f. Do not attempt to modify the compressor in any way.
- g. The use of any tool or accessory other than those designed for use with compressed air could result in injury to the operator.
- h. The output pressure of the compressor should be adjusted to the design pressure of the air tool or accessory being used.
- i. Always check that the output of the compressor does not exceed the maximum pressure for any attached tool or accessory.
- j. Repairs should only be carried out by qualified persons using original spare parts. Failure to do so may result in considerable danger to the user.

Breathable Air Warning

This compressor/pump is not equipped and should not be used to supply breathing quality air for any application of air for human consumption.

Check Damaged Parts

Before using the compressor it should be carefully checked to determine that it will operate properly and perform its intended function. Check for the correct alignment of moving parts ensuring they do not bind. Check for broken or missing parts and have them replaced or repaired at an authorised service centre. Check any other condition that may affect the operation of the compressor. A guard or any other part of the compressor that is damaged should be properly repaired or replaced by an authorised service centre.

GETTING STARTED

Assembly

This air compressor requires some minor assemble before it can be used.

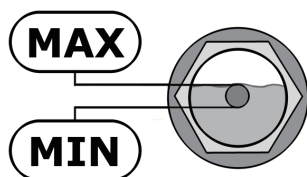
Locate the accessory pack/s. These should contain :

1. Wheel/s and axle set.
2. Rubber stoppers.
3. Air filters.
4. Oil filler breather.

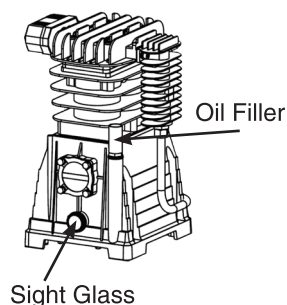
Position the unit on a even surface:

1. Fit the wheel/s to the unit.
2. Fit the rubber stoppers to the legs of the unit.
3. Remove the plastic transit plugs from the cylinder heads and screw in the plastic air filters.
4. Remove the plastic transit plugs from the pump oil filler hole and screw in the oil filler breather.

Oil Warning : Check the oil level before using the compressor.



Check the oil level. If necessary add oil until it reaches the red mark on the sight glass. Do Not over fill.



NOTE: The oil must be changed after the first 10 hours of operation then every 200 hours thereafter. Recommended compressor oil:

AGIP	DICREA100	MOBIL	RARUS 427
BP	ENERGOL CS100	FINA	EOLAN AC 100
SHELL	CORENA OIL H10	CASTROL	AIRCOL PD100
ESSO	EXXC OLUB 150	TOTAL	CORTUSA 100
FUCHX	RENOLIN 104L VG 100	API	CM-8X
IP	CALATIA OIL ISO 100		

(Suitable for room temperature ranging from +5°C to +25°C)

GETTING STARTED

Important

The pressure unloading valve vents the air from the pump once the tank is full. Note: Always use the choke to start (even when the engine is hot). Laying down is closed, standing up is open.

Starting And Stopping The Engine

For full detailed engine information please refer to the Honda GX160 Petrol Engine Manual

Ensure you check the oil level of both the engine and pump prior to use.

To Start:

1. Turn the fuel tap to the on position
2. Move the choke lever to the on position
3. Turn the engine switch to the on position
4. Open the pressure unloading valve
5. Pull the recoil starter gently until compression is felt, then pull briskly. (do not allow the starter grip to snap back against the engine, return it gently to prevent damage to the starter or housing).
6. Close the pressure unloading valve
7. Move the choke lever to the off position as the engine warms up.

To Stop:

1. Turn the engine switch to the off position
2. Turn the fuel tap to the off position

Using Your Compressor

AIR RECIVER SAFETY VALVE

The unloaded valve is pre-set to slow down the engine automatically at the maximum operation pressure. If the unloader valve doesn't work the safety valve will protect against over pressurizing the air receiver by "popping off" at its pre-set pressure setting.



WARNING



DO NOT ELIMINATE, MAKE ADJUSTMENT TO OR SUBSTITUTIONS FOR THE VALVE. Occasionally pull the ring on the safety valve to make sure hat the valve operates freely, if the valve is stuck or does not operate smoothly it must be replaced.

GETTING STARTED

Pump Unloading System

Your compressor is fitted with a valve which automatically releases pressure on the head of the unit each time when unloading. This means the engine restarts against zero pressure to maximize engine life and performance.

If air continually leaks from the unloading valve, then check for dirty non-return valve seals. If this occurs, drain the tank, remove the non-return valve hex nut and clean the seal, refit and then restart the compressor.



WARNING



DO NOT ATTEMPT TO ADJUST OR MODIFY THE PRESSURE UNLOADING VALVE.

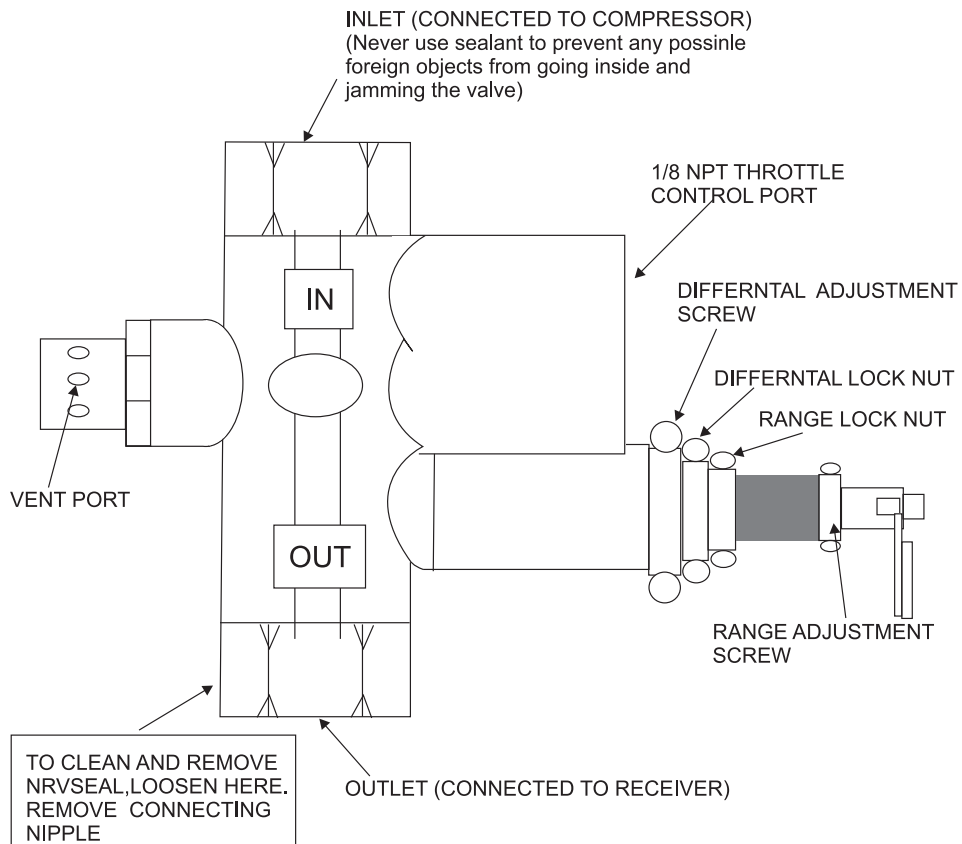
Idler Control Valve

This petrol compressor is fitted with an Idler Control Valve, these are used to control the running speed of the petrol engine in a set pressure range. The range has an unload setting and a load setting and as the compressor operates within this range, it is said to be cycling.

At the unload setting, the pilot valve opens and actuates the throttle control and at the load setting, the pilot valve closes and returns the compressor to normal operation. It also has a built in Non Return Valve which automatically vents pressure from the pump head when the compressor reaches the preset cut out pressure. A aluminium toggle lever can be found on the idler control valve which manually releases head pressure allowing the compressor to be started while the air receiver tank is pressurized.

The cut-in and cut-out pressures are set at the factory and does not normally need to be adjusted. However should the differential require adjustment, please contact ITM or an Authorised Service agent.

UNDER NO CIRCUMSTANCES SHOULD THE IDLER CONTROL VALVE BE ADJUSTED BY THE USER.





WARNING

Ensure the engine is not running when performing maintenance tasks to avoid injury.

MAINTENANCE REQUIRED	FREQUENCY
Check pump oil level	Before each use
Drain the condensation from the air tank	Before each use
Check for loose nuts / bolts and tighten	Before each use
Check for air leaks	Before each use
Remove air filter and clean (or replace as required)	Weekly
Check belt tension	Weekly
Change pump oil	Every 6 Months
Tighten cylinder head bolts	Every 6 Months
Clean and check non return valve	Every 6 Months

TROUBLE SHOOTING

TROUBLE	POSSIBLE CAUSES	REMEDIES
Engine will not start or running slowly	- No fuel in tank. - Fuel supply valve closed. - Engine control switch off. - Low oil pressure. - Engine not grounded properly. - Old fuel or water in fuel. - V-belts too tight or misaligned. - Compressor pump partially or totally seized. - Engine fault.	- Add fuel. - Open fuel supply valve. - Turn on control switch. - Add oil. - Ground battery to engine as recommended. - Replace fuel and add fuel stabilizer. - Adjust belts to proper tension and alignment. - Repair or replace compressor pump. - See engine manual.
Sticking of main compressor	- Moving parts burnt due to the oil insufficient. - Moving parts damaged, or stuck by foreign body.	Check crankshaft, bearing, connecting rod, piston, piston ring, etc. and replace if necessary.
Excessive vibration or abnormal noise	- Connecting part loose. - Foreign body got into main compressor. - Piston knocking valve seat. - Moving parts seriously worn.	- Check and retighten. - Check and clean away. - Replace with thicker paper gasket. - Repair or replace.
Pressure insufficient or discharge capacity decreased	- Engine running too slow. - Air filter choked up. - Leakage of safety valve. - Leakage of discharge pipe. - Sealing gasket damaged. - Valve plate damaged, carbon buildup or stuck. - Piston ring and cylinder worn or damaged.	- Check and remedy. - Clean or replace the cartridge. - Check and adjust. - Check and repair. - Check and replace. - Replace and clean. - Repair or replace.
Excessive oil consumption	- Oil level too high. - Breath pipe choked up. - Piston ring and cylinder worn or damaged.	- Keep the level within set range. - Check and clean. - Repair or replace.