

# airseries

HPC3010

HPC2050

**ENGLISH USER MANUAL** 



LICENSED BY HYUNDAI CORPORATION, KOREA LICENCIÉ PAR LA CORPORATION HYUNDAI, CORÉE

PRINTSPEC: EN2050/3010-2010v1 © 2010 MIDLAND INTERNATIONAL INC. Thank you for purchasing a Hyundai Air Compressor.

Please register your product in order for us to ensure your continuous satisfaction with our product.

This manual covers the safety, operation, and maintenance procedures for the  $\mbox{HPC-2050}$  and  $\mbox{HPC-3010}$ .

All information in this publication is based on the latest product information available at the time of approval for printing. No part of this publication may be reproduced without written permission.

If a problem should arise, please contact us by using the contact information found at the end of this manual.

It is important that this manual be read and fully understood before operating the compressor. Failure to do so may cause serious injuries and/or equipment damage.

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### 1.1 - GENERAL OPERATION SAFETY

- Always perform a pre-operation check before using the air compressor.
- Operators of the unit should always be wearing appropriate approved eye and hearing protection. Under some conditions, long durations of use may contribute to hearing loss.
- Always operate the air compressor according to the instructions for safe and dependable service.
- 4. Always clean and properly maintain the equipment after use.
- 5. To avoid harm, never operate the compressor in an enclosed area.
- Pay attention to all warning labels and be careful not to touch the marked parts of the compressor during and immediately after operation because they may cause burns.

### 1.2 - AC SAFETY GUIDELINES

Before connecting the compressor to an electrical device or power cord:

- Make sure that all parts are in right working order. Faulty devices or power cords can lead to an electrical shock.
- Turn off the air compressor immediately if the device begins to operate abnormally. Then disconnect the device and investigate the problem.

### 1.3 - MAINTENANCE SAFETY

- Turn off the air compressor before performing any maintenance. Otherwise, it can cause severe personal injury and/or death.
- Allow the air compressor to cool down before performing any maintenance
- Only qualified, licensed, and/or certified maintenance personnel with knowledge of fuels, electricity, and machinery hazards should perform maintenance procedures.

### 1.4 - AIR TANK SAFETY

- Drain the tank daily or after each use. Make sure to properly drain condensed water from the tank in order to prevent rust and/or thinning of the steel tank.
- If the tank develops a leak, replace it immediately with a new tank or new compressor outfit.
- Do not attempt to modify or repair the compressor tank. Never drill, weld, or make any modifications of any kind to the tank or its attachments.
  - Do not attempt to modify the pressure switch, safety valve, or any other components that control tank pressure. The tank is designed to

withstand specific operating pressures. Never make adjustments or substitute parts to alter the factory set operating pressures.

#### 1.5 - ATTACHMENTS AND ACCESSORIES SAFETY

- Do not exceed the pressure rating of air tools, spray guns, air operated accessories, air tires, hoses, and other inflatables. Exceeding pressure ratings may cause them to explode or become damaged, resulting in serious injury.
- Make sure to follow the equipment manufacturer's recommendation and never exceed the maximum allowable pressure rating of attachments
- Never use the compressor to inflate small, low pressure objects, such as children's toys.

### 1.6 - RISK OF EXPLOSION OR FIRE

- Make sure the air compressor is in a well-ventilated area, free of any combustible or flammable materials, gasoline, or solvent vapours.
- Make sure to keep the compressor at least 20 feet away when spraying flammable materials.
- Keep all flammable materials in a secure location away from the air compressor.
- Do not restrict any of the compressor's ventilation openings. This may cause overheating and could cause a fire.
- Make sure to operate the compressor in an open area at least 3 feet away from any wall or obstruction that could restrict the airflow of the compressor.

#### 1.7 - RISK OF BURSTING

- Make sure to drain the tank after each use. If the tank develops a leak, replace it immediately with a new tank or new compressor outfit.
- Do not attempt to modify or repair the tank. Any drilling, welding, or other forms of modification may result in serious injury to you and/ or others.
- Do not adjust regulator to result in output higher than marked maximum pressure of attachment.

### 1.8 - RISK OF ELECTRICAL SHOCK

- Do not operate in wet environments.
- Do not expose the compressor to rain.
- Make sure the compressor is properly grounded. Failure to ground the unit may increase the risk of electrical shock.



 All electrical work must be performed by a qualified or licensed/certified electrician.

### 1.9 - RISK TO BREATHING

- 1. Always operate the compressor in a well-ventilated area.
- Wear appropriate safety masks to reduce the risk of inhaling any harmful vapours.
- Do not breathe compressed air from the compressor. The compressed air is not breathable and may contain carbon monoxide, toxic vapours, and/or solid particles.
- Sprayed materials such as paint, paint solvents, paint remover, insecticides, weed killers, etc. contain harmful vapours and poisons.

### 1.10 - RISK OF BURN

- Do not touch any exposed metal components during or immediately after use of the compressor. The compressor will remain hot for several minutes after it has been shutdown.
- 2. Do not move the unit while the compressor is running.

### 1.11 - RISK OF FALLING

 Make sure that the compressor is in a stable and secure position before operating.

### 1.12 - RISK OF MOVING PARTS

- The compressor cycles automatically when the pressure switch is in the ON position.
- Do not remove and safety guards or covers. If guards and/or covers are damaged or removed, do not operate the compressor.
- Make sure to release pressure, turn off, and disconnect the compressor before performing any maintenance or repairs.
- Secure any and all loose clothing, hair, or jewellery that may be caught in the moving parts or the air vents of the compressor.
- attachments.
- Never use the compressor to inflate small, low pressure objects, such as children's toys.

**SECTION 2 - SPECIFICATIONS** 

MODEL	HPC-2050	HPC-3010
RUNNING HORSE- POWER	1/3 HP	1/3 HP
MAX PSI	100 PSI	100 PSI
SCFM @ 40 PSI	0.5 CFM	0.5 CFM
SCFM @ 90 PSI	0.4 CFM	0.4 CFM
TANK SIZE	2 Gal	2.6 Gal

### SECTION 3 FEATURES

### Pressure Switch

This controls the power to the motor and the cut-in/cut-out pressure settings. Also serves as the Auto-On/Off positions for the unit.

### Safety Valve

This valve allows excess tank pressure to escape into the atmosphere. It should open when tank pressure exceeds the maximum pressure rating.

### Check Valve

This valve closes when the pump is not in operation in order to retain air pressure in the tank.

### Tank Pressure Gauge

Indicates the reserve air pressure in the tank.

### Outlet Pressure Gauge

Indicates the outgoing air pressure to the tool or accessory.

### Regulator

Controls the air pressure leaving from the tank.

### Drain Valve

Used to drain excess moisture and condensation from the tank.

### Air Compressor Pump

Oil-free pump that compresses the air.

### Pressure Release Valve

This valve automatically releases compressed air momentarily when the compressor reaches cut-out pressure.

### Universal Quick Connect Body

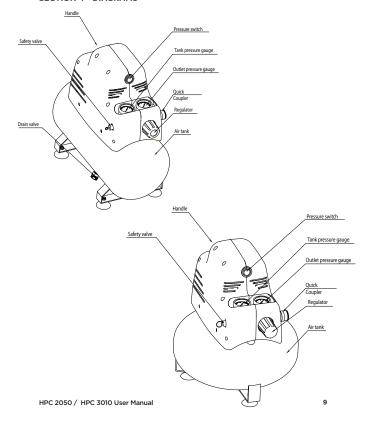


Allows for easy attachment and removal of the air hose.

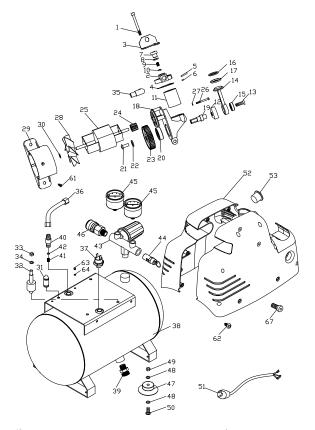
Motor Thermal Overload Protector

If the motor begins to overheat, this protector will shut off the motor.

### **SECTION 4 - DIAGRAMS**

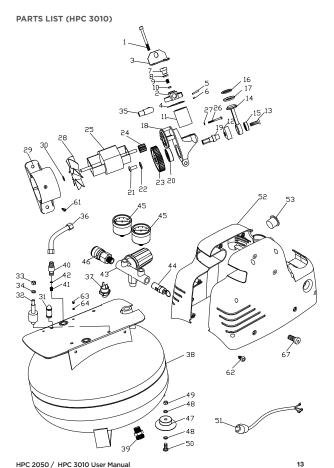


SECTION 5 - PARTS LIST (HPC 2050)



1	M5*50 Bolt	35	Elbow
2	Cylinder head	36	Rubber hose
3	Cylinder head support	37	Pressure switch
4	Rubber gasket	38	Tank
5	Valve plate	39	Drain valve
6	Gasket	40	Dual-adapter
7	End cap	41	0.5 spring
8	End cap seal	42	Seal ring
9	Spring	43	Regulator assembly
10	Seal gasket	44	Safety valve
11	Cylinder	45	Pressure gauge
12	Crankshaft	46	Milton quick coupler
13	M6*15 bolt for crank shaft	47	Rubber feet
14	Connecting rod	48	Flat washer
15	Bearing for rod	49	Nut
16	Cover plate	50	cross recessed pan head screw
17	Piston ring	51	Power cord
18	Crankcase	52	Plastic cover
19	Shaft	53	Power switch
20	Bearing for crankcase	54	Lead wire 1
21	M5*10 bolt	55	Lead wire 2
22	Flat washer	56	Terminal ring
23	Driven gear	57	Terminal ring

24	Driving gear	58	Terminal ring cover
25	Motor	59	Terminal ring cover
26	M3*30 bolt	60	Wire nail
27	Spring washer	61	Self tapping screw
28	Fan	62	Self tapping screw
29	Motor cover	63	Cross recessed pan head screw
30	6 jump ring	64	Tooth face washer
31	8 rubber support	65	Ring terminal
32	M6 double-screw bolt	66	Power cord cover
33	M6 nut	67	Screw
34	6 flat washer		



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#### SECTION 6 - START-UP & OPERATION

### INITIAL INSPECTION

All air compressors have been inspected carefully before leaving the factory. It is possible that poor handling during transport caused some damage to the compressor. Fully inspect the compressor before use.

- 1. Inspect the entire unit for any concealed and/or visible damage.
- Make sure any damaged parts are replaced and any mechanical issues are repaired by a qualified and licensed/certified mechanic.

### PRE-START CHECKLIST

- 1. Make sure that the ON/OFF switch is in the OFF position.
- 2. Make sure that the tank is fully drained.
- 3. Make sure that the tank pressure gauge reads 0 PSI.
- Make sure that the drain valves are closed.
- Make sure that all covers and safety guards are properly installed and in place.

#### INITIAL BREAK-IN PROCEDURE

The following instructions should be followed before the first time the compressor is operated in order to optimize the life of the compressor and to help prevent any damage to the unit.

- Make sure the regulator knob is turned fully counter-clockwise.
- Plug the power cord into a properly grounded power outlet.
- Open the drain valve in order to allow air to escape and prevent pressure from building up inside the tank.
- Turn the ON/OFF switch to the ON position.
- 5. Allow the compressor to run for approximately 15 minutes.
- Close the drain valve, allowing pressure to build to the cut-out pressure. The compressor will shut off automatically.
- Use the compressed air in the tank with an approved attachment or allow it to bleed out.

### START-UP

- Make sure the regulator knob is turned fully counter-clockwise.
- 2. Plug the power cord into a properly grounded power outlet.
- 3. Turn the ON/OFF switch to the ON position.
- Allow the compressor to reach the cut-out pressure. The compressor will shut off automatically.
- 5. Attach a hose and the desired accessory to the unit.
- Adjust the regulator knob to the desired pressure.

### SHUTDOWN

- Make sure that the ON/OFF switch is in the OFF position.
- Unplug the power cord from the outlet.
- Turn regulator knob counter-clockwise until the regulated pressure gauge reads 0 PSI.
- Remove the attached hose and accessory.
- Drain all air and water from the air tank.
- Once the tank is fully drained, close the drain valve.
- Store in a safe, drv. non-freezing area.

### **STORAGE**

- Do not store the compressor in areas that are humid and/or subject to temperature fluctuations. This may result in excess moisture or water forming in the tank, which may affect the compressors cycle times.
- Do not store in areas with excessive dust.
- After the ON/OFF switch is in the OFF position, unplug and properly store the power cord in a protected and safe position.



### **SECTION 7 - MAINTENANCE**

Proper maintenance is important in order to ensure safe, economical, and trouble-free operation. Improper maintenance may cause the air compressor to malfunction and can lead to serious injuries or death.



Shut off the compressor before performing any maintenance. When the engine is running, make sure the area is well ventilated. The compressed air may contain harmful vapours or particles.



Use authorized parts or their equivalent. The use of replacement parts which are not equivalent quality may damage the compressor.

NOTE: Some of these maintenance techniques can be dangerous and must be performed by a qualified technician.

In order to maintain high performance and extend the service life of the compressor, periodical inspection and adjustments should be done based on the following maintenance schedule:

PROCEDURES	DAILY OR BEFORE EACH USE	AFTER EACH USE	OTHER
General Inspection	Х		
Drain condensation in tank(s)	x		
Check for unusual noise/vibration	х		
Check for air leaks	Х		
Check safety relief valve	х		
Inspect air filter, replace if necessary			Approx. every 100 hours
Clean exterior of compressor		Х	

#### NOTICE:

- 1. Service more frequently when used in dusty areas.
- 2. Should be serviced by an authorized service dealer.
- Must be serviced by an authorized Hyundai Service Dealer. Failure to do so will void the warrantv.

### SECTION 8 - TROUBLESHOOTING

Many troubleshooting procedures present hazards which can result in severe personal injury or death. Only trained and experienced service personnel with knowledge of fuels, electricity, and machinery hazards should perform service procedures. Review Safety Precautions.

A hot compressor can cause severe burns. Always allow the compressor set to cool before performing any maintenance service.

PROBLEM	CAUSE	CORRECTION
Compressor does not start	Blown fuse or circuit breaker tripped     Loose electrical connections     Overheated motor	Check for cause and replace or reset Check wiring connections Use reset button Wait for automatic reset
Compressor does not supply enough pressure to operate	Air leak in safety valve     Restricted air filter     Defective check valve	Check valve manually – pull upward on rings. If condition persists, replace valve Clean or replace air filter Peplace check valve
Excessive tank pressure; Safety relief valve releasing	Defective pressure switch or improper adjustment	Check for proper adjustment and if problem persists, replace pressure switch

Moisture in discharged compressed air	Condensation in air tank caused by humidity     Compressor located in damp or humid area	Drain tank     Relocate the compressor     Purchase In-Line air filter system
Compressor does not or is slow to come up to speed	Defective motor or pump     Defective pressure switch     Use of an extension cord	Contact Hyundai     Power Customer     Service     Replace the pressure     switch     If possible, eliminate     extension cord
Compressor runs excessively hot	High duty cycles     Compressor unit cannot supply enough air     Extremely dusty atmosphere	Run compressor for lighter cycles     If accessory's required CFM is higher than pressure supply, larger compressor is required     Relocate the compressor
Excessive noise/vibra- tion during operation	Check valve is loose or broken     Defective motor or pump	Clean or replace check valve     Contact Hyundai Power Customer Service

Excessive starting and stopping	Hose, hose connections, or attached accessory leaks Condensation in air tank, high humidity Fittings are not tight enough Defective pressure switch Rusted or damaged air tank	Check for leaks and replace if necessary Drain tank Tighten any loose fittings Replace defective switch Replace tank immediately. Do not attempt to repair the tank
Air leaks	Fittings not tight enough     Air leaks at hose or accessory     Rusted or damaged tank	Tighten any loose fittings Check for leaks and replace if necessary Replace tank immediately. Do not attempt to repair the tank

### **SECTION 9 - GLOSSARY**

CFM - Cubic Feet per Minute

Cut-In Pressure – The tank's lowest pressure point at which the motor restarts automatically to build pressure.

Cut-Out Pressure – The tank's maximum pressure point at which the motor shuts off automatically.

Cycle - The series of steps that a compressor performs.

Cycle Time - The amount of time for a compressor to complete one cycle.

HP - Horsepower required at the compressor shaft to perform.

PSI - Pounds per Square Inch; A unit of measure of pressure.

Regulator - Device used to change the pressure from the compressor.

SCFM - Standardized Cubic Feet per Minute; a measure of airflow



#### SECTION 10 - WARRANTY

Midland International Inc. 26 Huddersfield Rd. Unit #2 Etobicoke, Ontario Canada, M9W 5Z6

This product is warranted to be free of defects in materials and workmanship for one year from the original date of purchase. This limited warranty guarantees that any defective parts will be repaired or replaced, at the warrantor's discretion, at no cost, including diagnosis and replacement parts.

### 1 Year Limited Warranty:

The warranty coverage is continual from the initial date of purchase and does not restart at anytime under any circumstances. This limited warranty is valid only when the air compressor receives all necessary preventative maintenance, as described in the Hyundai Air Compressor User Manual. The repair or replacement of a compressor will take place within a reasonable period of time during normal business hours.

All repaired and replacement parts shall be warranted for 90 days after the initial date of installation or purchase.

### Limitations of Remedies and Disclaimers

THE FOREGOING LIMITED WARRANTY IS EXCLUSIVE OF AND IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER WARRANTY, WHETHER EXPRESSED OR IMPLIED.

Midland International Inc. disclaims any responsibility for any indirect, incidental, or consequential loss or damage caused by any defects in material or workmanship.

This limited warranty will be voided if the compressor is used for commercial purposes.

All expenses incurred in maintaining and replacing parts for the compressor shall be incurred by the purchaser. This warranty coverage does not include parts affected by accident and/or collision, corrosion or rust, normal wear, use in an ap-

plication for which the product was not intended, service from an unauthorized service dealer, or any other misuse, neglect, incorporation or use of unsuitable attachments and/or parts. Under this warranty, the warrantor is not obligated to bear any transportation fees of any product to/from an authorized service dealer. Unauthorized alteration, installation, or any cause other than defects in material or workmanship of the product will not be covered under this warranty.

### Not covered by this Limited Warranty:

- Normal motor/pump wear
- Damage caused by a lack of maintenance as described in the Hyundai User Manual.
- 3. Damage caused by accidents, improper installation or storage.
- Damage caused by water ingestion, submersion, or external water damage.
- Damage or non-performance caused by operation of the compressor set in a marine application.
- Damage caused by operation with improper pressure, conditions, or modifications contrary to published specifications.
- Items not supplied by Hyundai, such as, but not limited to, external wiring, filters, etc.
- Repairs made during the warranty period without first obtaining a case number from Hyundai.

### **Product Registrations**

Product registration is required for all product support and warranty coverage. The purchaser must also provide the original proof of purchase. The owner's registration, found in the user manual, must be completed and mailed. You can also register online at www.hyundaipower.ca. You should keep your receipt for proof of purchase.

### **Warranty Claim Procedure**

Warranty service must be performed by a Hyundai authorized service dealer. If you feel your compressor is malfunctioning due to a defect or misuse, simply contact our customer support center for technical advice, a warranty claim, or general information.

Do not return your compressor to the place of purchase or repair. MIDLAND INTERNATIONAL INC. MUST BE CONTACTED TO PROVIDE A CASE NUMBER



### BEFORE ANY WARRANTY WORK CAN BEGIN.

To obtain warranty service, contact our customer support center:

Toll Free: 1-877-528-3772

E-mail: support@Hyundaipower.ca Website: www.Hyundaipower.ca