

# **NIKRO**

## **INSTRUCTION MANUAL**



**MODEL # HP20GAS**

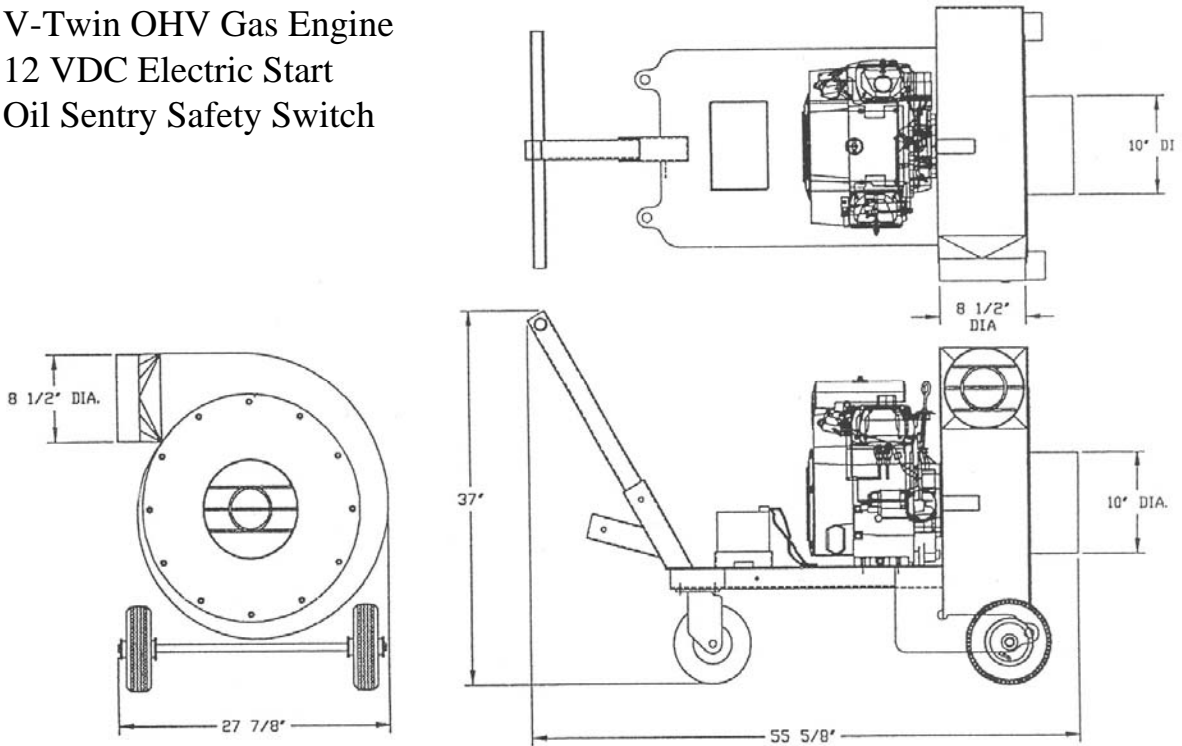
**PORTABLE GAS POWERED  
VACUUM**

# DIMENSIONS AND SPECIFICATIONS

Overall Weight: 370 lbs.

## Engine

- 20 HP Kohler Command Series V-Twin OHV Gas Engine
- 12 VDC Electric Start
- Oil Sentry Safety Switch



## QUALITY DESIGN FEATURES

- 10" Diameter Inlet with Optional 10" x 8" Transition
- Inlet/Discharge Safety Guards
- Exhaust Safety Shield
- Remote Mounted Oil Filter
- Oil Drain Extension with Quick Change Valve
- Removable Two Position Padded Handle
- High Impact Battery Box
- Pneumatic Wheels (2) Stationary, (2) Swivel with locks
- High Efficiency Zippered Filter Bags or optional disposable filter bags
- Integral Vibration Free Base
- Dynamically Balanced Material Handling Wheel
- Exclusive 2 Year Warranty

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# **SECTION 1: SAFETY**

## **1-1 GENERAL**

Safety is proudly built into every product manufactured and sold by Nikro Industries Inc. Carelessness and or negligence are the usual causes for personnel injury and equipment failure. Safety is very important to everyone so we insist that all operators read and understand this manual.

- 1) Equipment is to be operated by trained qualified personnel only.
- 2) Always read and follow the operating and safety procedures.
- 3) Do not operate without all guards and safety equipment installed in the proper location and in working order.
- 4) Do not disable any safety features. They are there for you protection.
- 5) Always us qualified personnel when repairing or maintaining the equipment.
- 6) This equipment must be used only for the purpose for which it was intended. Any other use will void the warranty and could cause bodily injury to the operator and costly damage to the equipment.
- 7) If a malfunction should occur, turn the machine off immediately and correct the problem, before restarting the machine.
- 8) Do not leave the equipment unattended while it is running.
- 9) Do not wear loose clothing or jewelry when operating this equipment. Long hair should be confined by a hat or a hair net.
- 10) Do not operate under the influence of alcohol or drugs.

## **1-2 DUCT CLEANING SAFETY**

- 1) Limit the operation only to those personnel trained in the proper use and operation of the machinery.
- 2) Never operate the machine without proper ventilation.
- 3) Keep all clothing and your body away from the rotating equipment.
- 4) Obey all safety labels and instructions affixed to the machine.
- 5) Never run the machine speed faster than the factory settings.

If there are any questions as to the safe operation of this equipment, please do not hesitate to contact us at 1-800-875-6457.

## **SECTION 2: SPECIFICATIONS**

### **2-1 PURPOSE**

The Nikro HP20GAS is designed to safely and easily clean heating and cooling ducts. We recommend the owner / operator contact and become a member of the National Air Duct Cleaning Association. 202-737-2926. Contact them if you have any questions concerning the proper approved mechanical cleaning methods.

Your HP20GAS is usually sold as a package with a compressor and the proper duct cleaning accessories to do an affective job. If your HP20GAS was not purchased as a system then you must have the following items to start cleaning ducts.

- A) Hose inlet adapter (if 10 hose is not used)
- B) 8" or 10" hose
- C) When using more than one length of hose then you must us a hose connector.
- D) 8" or 10" duct collar (depending on the hose size)
- E) Air Compressor
- F) Duct Ball System
- G) Manual or Rotary Brushes
- H) Hole Saws
- I) Patches
- J) Sheet Metal Screws

If you do not have the cleaning accessories listed above call Nikro Industries for assistance.

## **SECTION 3: PRE START-UP CHECKLIST**

### **3-1 RECEIVING YOUR HP20GAS**

Immediately check the condition of your new HP20GAS as received. The machine was shipped in perfect condition and should arrive the same way. If there are any visible problems, mark them on the Bill Of Landing that the carrier has and call his office immediately before the drive leaves your premises. As sympathetic as we are to any damages or shortages that occur in shipping, Nikro Industries, Inc. has no legal recourse for such claims. Title to your machine was transferred to the carrier as soon as it left our dock. However, please let us know by phone and writing about any problems so that we can assist you with immediate replacement parts or information.

### **3-2 UNCRATING**

Carefully remove all the packing materials and check the parts against the Packing List. Your HP20GAS was test-run and shipped with all fluids at the proper levels. Check them now and top off as required. Fill the gas tank. Your new HP20 is now ready for operation.

## SECTION 4: START-UP



**AT ALL TIMES KEEP YOU HANDS, CLOTHING, ETC. AWAY FROM THE INLET AND DISCHARGE OF YOUR HP20.**

- 1) Place your HP20 on a level surface. Position it so the filter bag will not be blown by the wind and come in contact with the exhaust system. Apply the brake located on the swivel caster.
- 2) Attach the filter bag to the HP20 discharge using the strap clamp provided.
- 3) Attach the hose to the inlet of the HP20 using the clamp provided.
- 4) Additional hose lengths may then be attached to the hose using hose connectors and clamps.
- 5) Drill the correct size hole in the ductwork and attach the hose and duct collar.
- 6) Attach the fuel tank to the engine and open the vent on the gas tank.



**DO NOT OVERFILL THE GAS TANK. ALLOW ROOM FOR EXPANSION OF THE FUEL. DO NOT LET THE FUEL LINE COME IN CONACT WITH THE EXHAUST SYSTEM.**

- 7) Refer to the engine manual for the correct starting procedures for the engine. Start the engine.
- 8) Your HP20 is now ready for service.



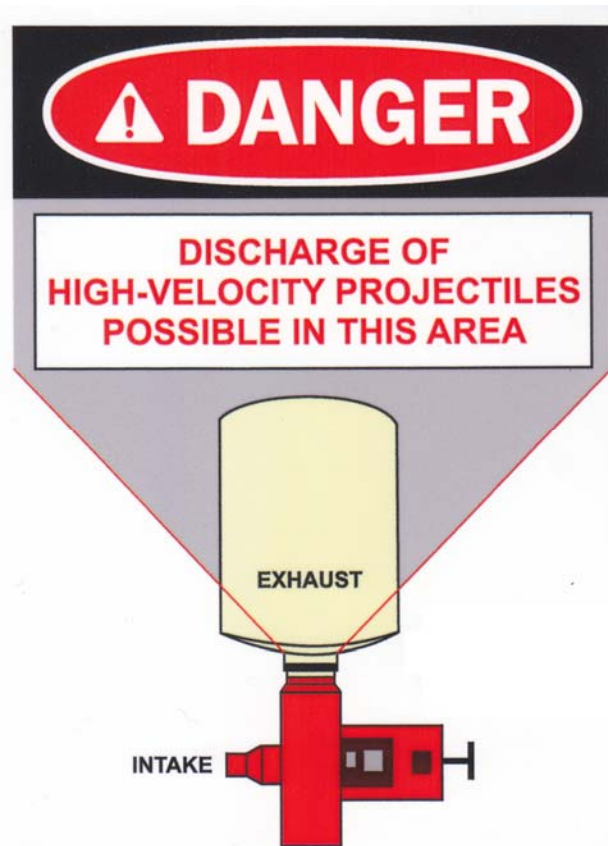
**REMEMBER SAFETY FIRST!!!!!!**

- 1) When not using the HP20 move the throttle to the slow position.
- 2) Your HP20 is a powerful vacuum and should be treated as such. Wooden boards, nails and other foreign materials other than dust are commonly found in duct systems. There is always the possibility of these objects penetrating the filter bag. Keep children and pets away from the machine while it is running.

## REMEMBER: SAFETY FIRST!!!!

- Equipment is to be operated by trained qualified personnel only.
- AT ALL TIMES KEEP YOUR HANDS, CLOTHING, ETC. AWAY FROM THE INLET AND DISCHARGE OF YOUR VACUUM.
- **Keep children and pets away from the machine while it is running.**
- When not using the **HP20GAS** move the throttle to the slow position.
- Your **HP20GAS** is a powerful vacuum and should be treated as such. Wooden boards, nails and other foreign materials are commonly found in insulation. There is always the possibility of these objects penetrating the filter bag. Be aware of the possible discharge area noted in diagram #1 and position the vacuum accordingly.

Diagram #1





## **SECTION 5: SHUT DOWN**

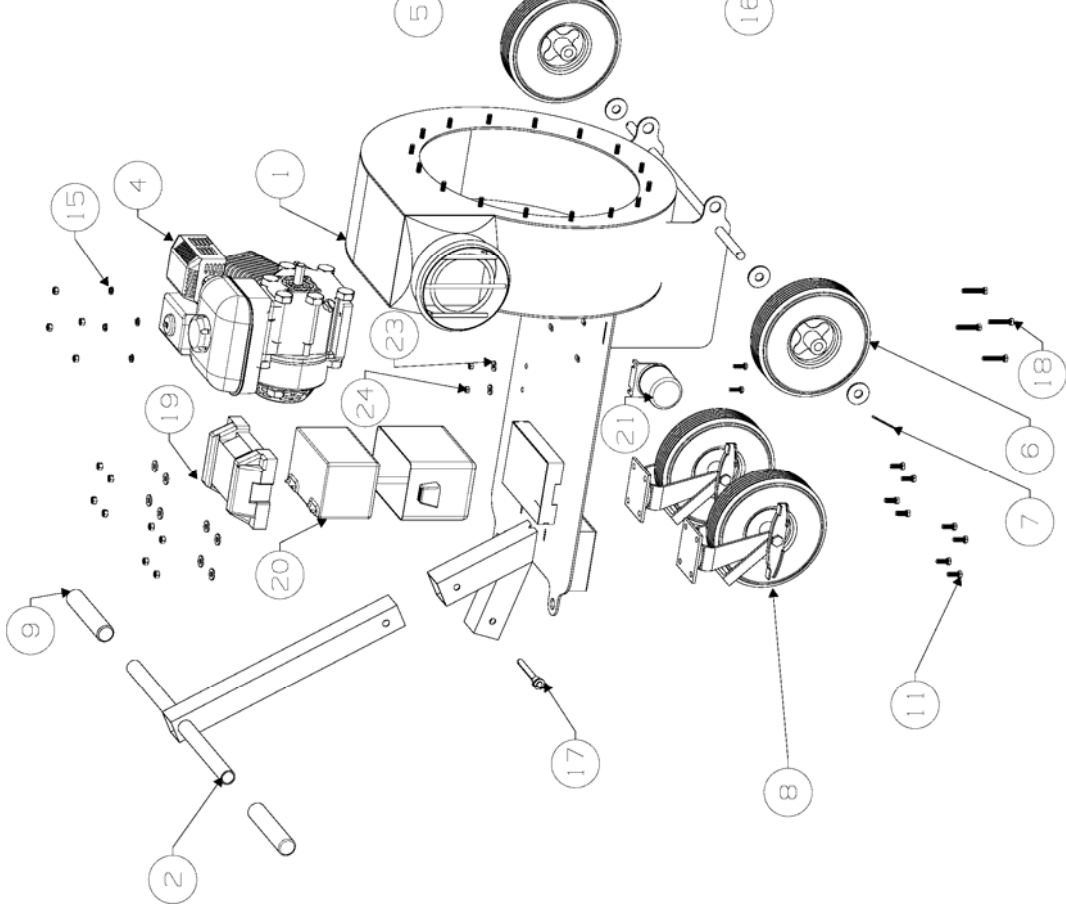
- 1) Move to the slow position. Run the machine for approx. 5 minutes.
- 2) Turn the engine off.
- 3) Remove the bag.
- 4) Disconnect the hose.



**CAUTION! DO NOT REMOVE THE HOSE OR THE BAG UNTIL THE HP20GAS HAS COME TO A COMPLETE STOP.**

# SECTION 6: PARTS LIST

PC NO	PART NO	PART NAME	QTY	PC NO	PART NO	PART NAME	QTY
25	B61B69	HP20 GAS LINE CLAMP	2	1	B61721	BLOWER ASSEMBLY 20HP	1
26	B61B68	HP20 BRASS BO	2	2	B62079	INSUL VAC TEE HANDLE	1
27	B61D91	LG NIKRO LOGO/WHITE	1	3	B62136	INTAKE HP20	1
28	B61B74	BATTERY TERMINAL COVER	1	4	B61568	20HP KOHLER ENGINE	1
29	B61B91	BATTERY CABLE/RED	1	5	B62133	FLAT WASHER 2" X 13/16	4
30	B61B92	BATTERY CABLE/BLACK	1	6	B61866	HP20 10" PNEUMATIC	2
31	B61B31	OIL DRAIN HOSE	1	7	B62134	COTTER PIN/AXLE	2
32	B61B32	OIL DRAIN COUPLING (INSULVAC)	1	8	B61895	HP20 CASTER	2
33	B61B72	CAL/DANGER ROTATING EQUIPMENTS	1	9	B61852	FOAM GRIPS/INSULVACS	2
34	B61B71	ECAL/DANGER POWERFUL SUCTION	1	10	B61126	HP20 FAN WHEEL	1
35	B61B70	ECAL/DANGER DO NOT OPERATE	1	11	B61747	3/8-16 X 1" HEX BOLT	8
36	B61B33	OIL DRAIN VALVE (INSULVAC)	1	12	B61778	3/8" SAS FLAT WASHER	28
37	B61B57	MUFFLER HP20	1	13	B61773	NUT HEX ZN 3/8-16	28
38	B61B58	MUFFLER GUARD KIT HP20	1	14	B61811	5/16-18 X 1" HEX HEAD SCREW FU	5
				15	B61070	3-8 LOCK WASHER	8
				16	B62137	5/16-24 X 3/4" HEX HEAD SCREW	4
				17	B61853	LOCKING PIN/INSULVACS	1
				18	B62138	3/8-16 X 2" HEX BOLT	4
				19	B61858	BATTERY BOX/HP20-INSUL VAC	1
				20	B61875	BATTERY 12V-INSUL VAC	1
				21	B61859	HEX NUT OIL FILTER	1
				22	B61513	WASHER LOCK 5/16"	2
				23	B61512	WASHER 5/16" FLAT	2
				24	B61768	HEX NUT 5/16-18 ZN	2



## 6-2 MAINTENANCE

- 1) ENGINE: Refer to the attached service manual for the engine servicing.
- 2) BATTERY: The batter provided with your equipment is of the lead acid type. The battery cables should be checked daily for corrosion and tightness.
- 3) FAN HOUSING AND WHEEL: During the normal use of your HP20, no maintenance is required on the fan wheel or housing.

If a problem, noise, or vibration should occur stop the equipment immediately!! Contact the factory as soon as possible. Do not operate this equipment until it has been thoroughly checked by the factory or factory authorized representative.



**THE FAN WHEEL ASSEMBLY HAS BEEN BALANCED AT THE FACTORY. NOISES OR VIBRATIONS COMING FROM THE FAN MEANS THAT FOR SOME REASON THE FAN WHEEL HAS BECOME OUT OF BALANCE. THE ASSEMBLY IS ROTATING AT 3600 RPM. IN AN OUT OF BALANCE SITUATION THE POSSIBILITY OF THE WHEEL EXPLODING IN THE HOUSING IS EXTREMELY GREAT IF ALLOWED TO CONTINUE. *THE POSSIBILITY OF INJURY OR DEATH TO THE OPERATOR OR ANY BYSTANDERS IS VERY REAL***

Do not replace the factory fan with any other fan other than the factory approved replacement.

## SECTION7: TROUBLESHOOTING

ENGINE: Refer to attached owners manual for engine servicing and troubleshooting.

NO SUCTION FROM THE END OF THE HOSE.

- 1) Stop Engine
- 2) Check hoses for blockage or loose connections
- 3) Check fan inlet for blockage
- 4) Check discharge for blockage
- 5) Inspect fan interior for blockage

## WARRANTY

Nikro equipment is warranted for 2 years from the date delivered to the original purchaser. Parts, which become defective due to faulty workmanship or materials during normal use in these years will be repaired or exchanged at no charge if returned and approved by an authorized Nikro service center. The freight shall be at the expense of the customer.

This warranty does not apply to normal wear and tear, neglect, misuse, or incorrect installation. If any other replacement parts, filters or attachments are used other an original Nikro parts, this warranty will become void.

This warranty does not apply to hoses, switches, lights, sensors, or breaks in cords. All motors are subject to manufacturer's warranty. Contact Nikro Industries for assistance with these items.

Nikro disclaims responsibility for loss of production, profits, or any other costs that may indirectly occur due to the failure of this product.

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**INDUSTRIES, INC.**