



*"Ergonomic Solutions"*

**HTVG 36-37-39  
VERTICAL GRINDER ASSEMBLY**



**MADE IN THE USA**

**Honsa Ergonomic Technologies, Inc.**

*Made in the U.S.A.*

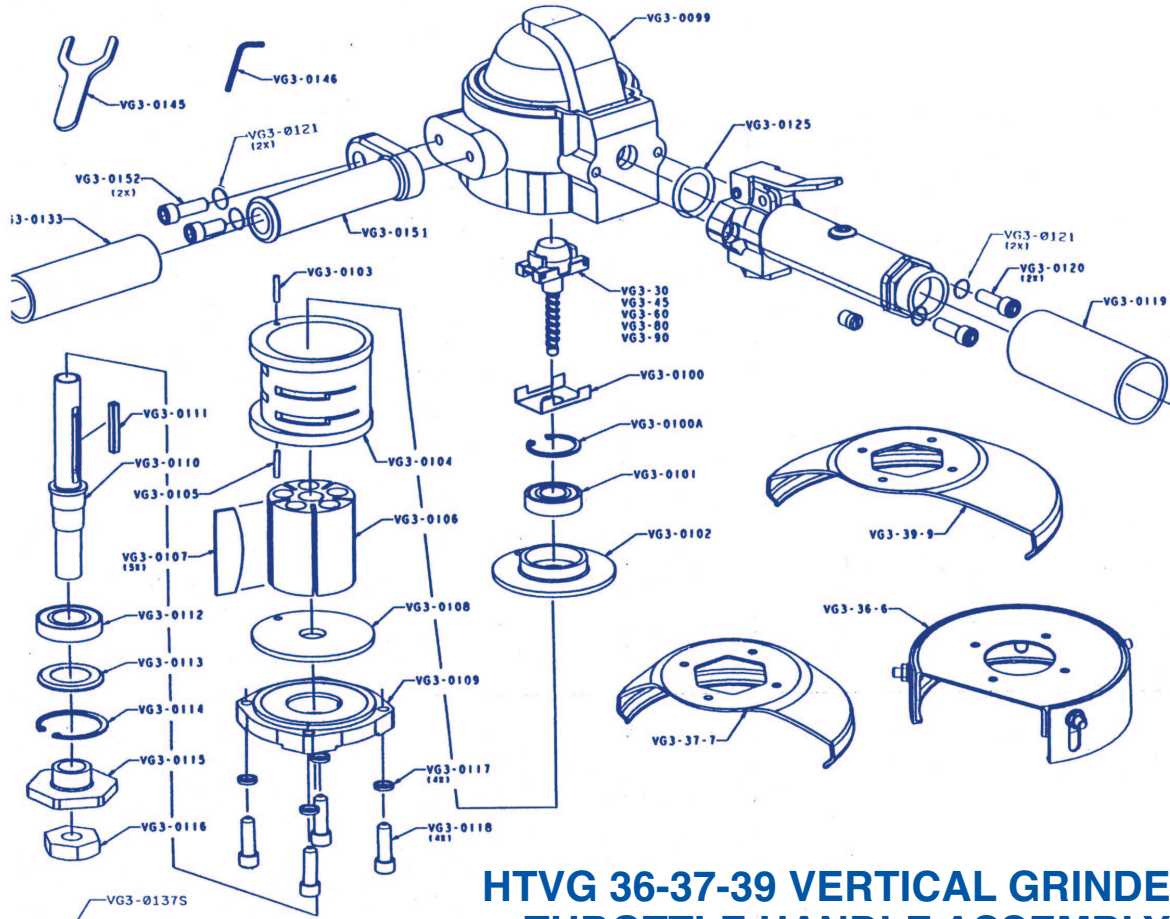
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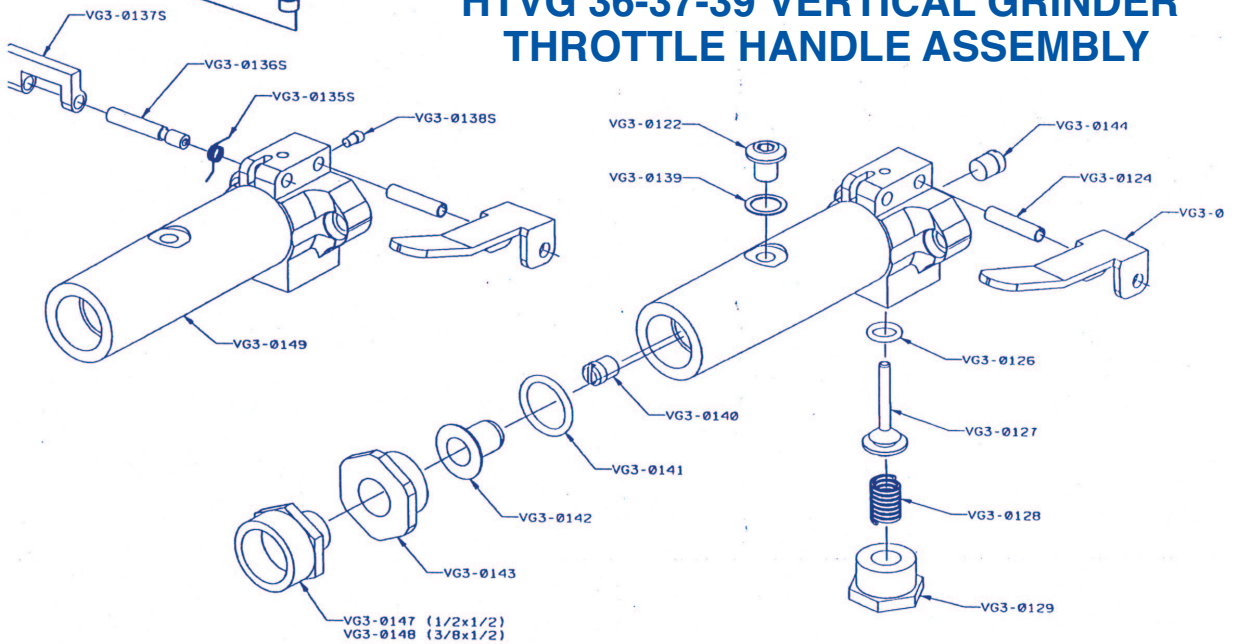
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## HTVG 36-37-39 VERTICAL GRINDER ASSEMBLY



## HTVG 36-37-39 VERTICAL GRINDER THROTTLE HANDLE ASSEMBLY



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rev 01/2020

## HONSA TOOL OPERATING INSTRUCTIONS/CAUTIONS

### **-BEFORE PLACING THIS TOOL IN OPERATION, READ THE FOLLOWING INSTRUCTIONS-**

This new tool is designed to reduce the vibration normally transmitted to the Operator. To be effective, it must be used safely. The Operator should only hold the tool by the handle provided. The vibration damping system is built into this handle, so the Operator should not hold this tool by the barrel, chisel, or rivet set. If the operation requires holding a chisel or rivet set, a HONSA TOOLS ISOLATOR should be utilized on that portion of the tool.

**WARNING:** While this tool is designed to significantly reduce the vibration, it is not guaranteed, nor implied to totally remove vibration. Safety procedures and evaluation systems such as those recommended and described in ANSI s3.34, ISO 5349 & ISO 8662 and by the ACGIH for threshold limits of vibration should be used as guidelines for daily exposure of hand-arm vibration. These values should be used as guides for the control of hand-arm exposure and because of individual susceptibility, should not be regarded as defining a boundary between safe and dangerous levels.

### **THE FOLLOWING SAFETY PROCEDURES ARE RECOMMENDED BY THE COMPRESSED AIR AND GAS INSTITUTE:**

1. Eye protection **must** be worn at all times when operating power tools.
2. Ear protection **must** be worn at all times when operating power tools.
3. A retainer should be installed on a percussion tool which, without such a retainer, can eject the chisel or rivet set, punch or similar equipment, when the tool is operated off a work surface. **NEVER OPERATE TOOL WITHOUT A RETAINER OR WHEEL GUARD.**
4. If a Quick Disconnect coupling is used on a percussion tool, it should be separated from the tool with a whip hose.
5. A percussion tool should not be operated unless the chisel, rivet set, scaling tool, or other is in position in the tool and in contact with the work place. Tools should be used in such a manner that ejection of an accessory **will not** endanger adjacent personnel.
6. When percussion tools are not in use, the dies and accessories should be removed unless they are retained in a positivementann

### **PROPER OPERATION AND MAINTENANCE**

Daily before using, before putting a new or old tool into service and after eight hours of use, pour about one tablespoon of HONSA Bio-Green Air Tool Lubricant 10WT into air inlet, connect air hose and operate tool to allow oil to be carried throughout the interior.

1. Keep tool properly lubricated with HONSA Bio-Green Air Tool Lubricant 10WT.
2. Provide 90 PSIG (6.2 bar) of clean, dry air **AT THE TOOL**.
3. Set up and maintain an inspection and repair program, regularly scheduled at intervals, governed by the degree of use to which the tool is subjected.
4. Blow out any dust and debris from inside hose before connecting it to tool.
5. Ensure that the cylinder/barrel is completely tight in the handle assembly.
6. Replacement of worn minor parts will avoid more extensive repairs and maintain the tool at its highest efficiency.



## **LUBRICATION**

1. An air line filter-regulator-lubricator should be located as closely as possible to the tool.
2. Clean out dirt and moisture from air hoses daily. Keep screen handle bushing in tool.
3. **OIL TOOLS DAILY.** Exxon's Spinesstic 10, Atlantic Richfield's Duro 55, Gulf's Gulfspin 10 or an equivalent is recommended. Pour about 1 tablespoon in air inlet and run tool to allow oil to be carried to the interior.

**ADDITIONAL SAFETY INFORMATION IS AVAILABLE FROM THE AMERICAN NATIONAL STANDARDS INSTITUTE, INC. 1430 Broadway, New York, N.Y. 10018 (ANSI B186.1)**

This grinder is equipped with a governor which controls the operating speed. This governor is warranted for the life of the tool. If the governor is not operating properly please immediately return it to the manufacturer.

### **DIS-ASSEMBLY**

1. Disconnect air and remove all wheels and accessories.
2. Secure the dead handle (VG3-0134A) the grinder in a vise. Remove the four socket head screws (VG3-0118) and remove wheel guard.
3. Grasp the wheel flange (VG3-0115) and pull the complete motor assembly from the case. If tight, put 5/8-11 (VG3-0116) hex nut on shaft and grip firmly in vise; using soft hammer, remove case assembly by tapping alternately at live and dead handle joints.
4. Put the flats of the wheel flange in the vise and remove governor. (Left-hand thread)
5. Remove snap ring (VG3-0100A). Holding the cylinder (VG3-0104) in the left hand, place a pin in the hole left by the removal of the governor. With a small hammer, tap lightly on the end of this pin, which separates the spindle (VG3-0110) from the rear bearing (VG3-0101) and the REAR thrust plate (VG3-0102)
6. Remove cylinder (VG3-0104), rotor blades (VG3-0107) at this time.
7. Clamp spindle holder in vise vertically. Line up the keyway in the holder and slide the spindle assembly through. Remove wheel flange (right hand thread) with suitable wrench.
8. Remove spindle assembly from holder. Remove key (VG3-0111) and lift out front thrust plate (VG3-0108).
9. Press out spindle (VG3-0110) with arbor press.
10. Secure bearing support plate (VG3-0109) and remove snap ring (VG3-0114) and bearing cover (VG3-0113).
11. Press out bearing (VG3-0112).
12. To check throttle valve, unscrew plug (VG3-0129) and lift out valve spring (VG3-0128) and throttle valve (VG3-0127). Remove the "o" ring (VG3-0126) with a sharp tool and replace with a new ring.



## RE-ASSEMBLY

1. Press new bearing (VG3-0112) into bearing support (VG3-0109).
2. Secure bearing support (VG3-0109) and replace snap ring (VG3-0114) and bearing cover (VG3-0113).
3. Support bearing and press spindle (VG3-0110) through. Replace front thrust plate (VG3-0108) and key (VG3-0111).
4. Clamp spindle holder (VG3-0150) in vise vertically. Line up the keyway in the holder and slide assembly through.
5. Lightly grease the small outside diameter of the wheel flange (VG3-0115). Thread wheel flange clockwise by hand while rotating the bearing support counter-clockwise until wheel flange bottoms on bearing. Tighten to 65 ft lbs. with suitable wrench. Remove assembly from spindle holder.
6. Line up cylinder pin holes in the bearing support (VG3-0109) and the front thrust (VG3-108). Clamp wheel flange in vise.
7. Put key (VG3-0111) in spindle keyway. Slide rotor onto spindle (VG3-0106) and insert all 5 blades (VG3-0107).
8. Put cylinder (VG3-0104) into place with long dowel pin DOWN. This dowel pin must go through hole in front thrust and front bearing support.
9. Slip rear bearing (VG3-0101) in rear thrust (VG3-0102) and press on spindle. (Press on inner race of bearing). Be sure that short dowel pin in cylinder goes into hole in rear thrust plate.
10. Put snap ring (VG3-0100A) on spindle. (There is no groove.)
11. Prior to re-assembly inspect governor for gouges, nicks or dents. Screw governor tight in rear spindle. This is a left hand thread. Oil governor and inside of motor.
12. Assemble live handle; add live and dead handles to housing.
13. Drop motor package in housing and line up holes in front bearing support with those in front of housing.
14. Line up guard with motor holes. Install the four bolts (VG3-0118) and lock washers (VG3-0117). Tighten bolts down until snug then back off 1/2 turn.
15. Connect tool to air supply and apply air in several short bursts.
16. Now run tool and tighten down bolts evenly. (Alternating from corner to corner.)
17. **CHECK RPM WITH A RELIABLE TACHOMETER. TOOL MUST RUN AT OR BELOW SPEED THAT IS STAMPED ON THE TOOL.**
18. **ALWAYS BE SURE TO WEAR HEARING PROTECTION AND EYE PROTECTION WHEN OPERATING ANY GRINDING TOOL. ALWAYS CONSULT THE OPERATING MANUAL FOR CORRECT SAFETY INFORMATION.**

**NEVER OPERATE THIS OR ANY GRINDING TOOL WITHOUT THE CORRECT OR RECOMMENDED WHEEL GUARD. CONTINUOUS USE OR EXPOSURE TO VIBRATION CAN CAUSE INJURY TO HANDS AND ARMS.**



## WARRANTY

Honsa Tools warrants this tool to be free of defects in materials and original workmanship for **1 year from date of purchase**. **The obligation assumed under this guarantee is limited to the replacing of any part or parts which prove to our satisfaction, under examination, to have been defective. This guarantee does not cover damage caused by misuse or normal wear, dirt or debris.**

Honsa Tools makes no other warranty, and implied warranties for fitness for a particular use or purpose are hereby disclaimed. Honsa Tools' liability is limited to the purchase price of the tool and Honsa tools shall not be liable for consequential, indirect or special damages of any nature arising from the sale or use of Honsa tools.

The warranty shall not apply to any tool that has been subjected to: misuse, accident, negligence or modification; or in which parts not made and supplied by Honsa Tools have been used, altered or repaired by other than Honsa Tools personnel or authorized repair/maintenance companies, or in the determination of Honsa Tools, any non intended use affecting its' operation.

## Factory Service

Any tool being returned for service must be pre-approved and a return authorization number must be issued for each tool by approved Honsa Tools personnel.

All Honsa Tools must be sent prepaid to:

**Honsa Ergonomic Technologies, Inc.**  
**1300 11<sup>th</sup> Street West**  
**Milan, IL 61264**

**Honsa Ergonomic Technologies, Inc.**

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