

USER'S MANUAL



POST DRIVER

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INTRODUCTION

Congratulations on choosing the ZODIAC Gas-Powered Post Driver. We are certain you will be pleased with your purchase. The performance of this tool is dependent upon your knowledge of the information contained in this operator's manual and your understanding of the operation and care of the Honda engine installed on your ZODIAC Post Driver.

This post driver is powered by a Honda GX35 engine. Honda supplies its own operator's manual, which covers all aspects of operating and maintaining your Honda engine. The Honda manual is provided to you along with this ZODIAC operator's manual. Keep both manuals with your machine for reference by all operators. Follow all recommended maintenance for both the ZODIAC Post Driver and the Honda engine.

Your ZODIAC Post Driver comes with a one-year parts warranty (see warranty terms on Page 17 of this manual). We suggest that you read the warranty information and fully understand its coverage and your responsibilities of ownership. To register your ZODIAC Post Driver, simply fill out and return the warranty registration card enclosed with your machine.


The Honda warranty is separate from the ZODIAC warranty and is subject to its own coverage conditions and responsibilities of ownership. You can find the Honda warranty included with your Honda operator's manual.

Please contact ZODIAC at info@iberfemce.com for parts or technical questions related to your post driver warranty. Please contact your local Honda service dealer for parts or technical questions related to your engine.

To reduce the risk of serious injury or death, you must read and understand the safety and operating instructions in this user's manual. Each and every new person who uses this machine must be educated and fully understand this operator's manual. Never allow an uninformed person to use your ZODIAC Post Driver.

BEFORE USE

- Always maintain 10-12 pounds of down-pressure while driving a post.
- Keep the driver level on the post at all times.
- **DO NOT** allow the barrel of the driver to come in contact with the ground.
- **DO NOT** push the throttle trigger unless driver is loaded on the post.
- Your driver will arrive with grease in the crank. **DO NOT ADD ANY ADDITIONAL GREASE UNTIL NECESSARY.** Check the crank grease level about every 3 months.
- In the event of dry-fire or misfire, you will need to re-engage the anvil by lifting the driver up and setting it back down on the post with some pressure applied.
- Continual dry-fire or misfire will cause damage to your driver, which will not be covered under the terms of the warranty.

 **IMPORTANTE:** MOTOR 4 TIEMPOS. GASOLINA 95. NO NECESITA MEZCLA.



SAFETY WARNINGS

This post driver is intended for use by informed adults only. Never allow children or uninformed persons to operate this machine. Never let your post driver run unattended. When not in use, turn the driver off to prevent unauthorized persons from using it.

DO NOT use the ZODIAC Post Driver for any purpose other than driving posts or rods into the ground. Misuse may result in serious injury to yourself or others, as well as damage to your driver or other surrounding property.



To prevent serious damage to you and those around you, you must read and understand the instructions for use and maintenance of the equipment manual. Every new person using this machine must be trained in the use of the machine according to the operating manual.

UNDERGROUND UTILITIES

Prior to driving any object into the ground, always have the location of underground utilities identified by a certified locating service. Driving posts or rods into an underground utility line can be extremely dangerous. Severe or life-threatening personal and property damage can occur. Be absolutely certain you know where the underground utilities are located. Underground utilities that may be present include, but are not limited to, electric, gas, telephone, water, sewer, TV cable, or lawn sprinkler lines

GASOLINE AND EXHAUST

Gasoline is highly flammable and explosive. You can be seriously injured when not handling and storing gasoline properly. Always use an approved gas storage container for your fuel. Never attempt to add gasoline to your ZODIAC Post Driver while the engine is hot or running, as there is a chance of fumes igniting and causing severe personal damage, as well as damage to your machine.

Never use the ZODIAC Post Driver inside a building or unventilated area. The engine exhaust contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas. These fumes can cause unconsciousness or death.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Always use approved protective equipment. Operators and all other persons in the immediate working area must wear protective equipment as well. Noise emitted from the machine while working can reach above 100 decibels, which can also harm others in close proximity. Please consider this while operating. We recommend the following personal protective equipment:

- Class 4 (SLC80 = 22.4 dB) hearing protection or greater
- Impact-resistant eye protection with side guards
- Protective gloves
- Protective boots



VIBRATION HAZARD WARNING

Prolonged use of a power tool exposes the operator to vibrations, which may cause white finger disease or carpal tunnel syndrome. These conditions reduce the hands ability to feel and regulate normal temperature, produce numbness and burning sensations, and may even cause nerve and circulation damage. If numbness, tingling, pain, clumsiness, weakened grip, whitening of the skin, or any other symptoms occur at any time when operating the machine, or when not operating the machine, immediately discontinue use of the machine and seek medical attention. Continued use of the machine after the occurrence of any such symptom may increase the risk of symptoms becoming more severe and/or permanent. ZODIAC Post Drivers are designed with internal spring-dampened handles to reduce the amount of vibration transmitted to the operator.

- Wear gloves for comfort and grip. Keep hands warm while operating.
- Check the machine for loose connectors and components, as these could lead to increased levels of vibration.

- Keep a firm grip on the handles at all times, but **DO NOT** excessively squeeze the handles.

MAINTENANCE WARNING

If the warning label on your post driver is not able to be read clearly, replace it immediately. Call ZODIAC for a new warning label at no cost to you.

Regular maintenance is a prerequisite for keeping the machine safe and effective. Carefully follow all the operating instructions in this manual. Any damage or malfunction caused by unauthorized use, parts, or modifications to the machine will not be covered by warranty or carry any significance for any type of product liability.

- Replace worn or damaged components as soon as they are identified.
- When cleaning mechanical parts with solvent, make sure to comply with safety precautions on the cleaning product labels, and make sure you have adequate ventilation.
- Engine maintenance is to be carried out according to the Honda specifications found in the Honda GX35 manual. For engine service or repairs, contact your local Honda dealer.
- For major service or repairs to the machine, contact ZODIAC.

OPERATING INSTRUCTIONS

Your ZODIAC Post Driver is designed to be as effective and efficient as possible, while being extremely powerful and lightweight. It is very important to understand that your post driver is a powerful machine. With proper use and maintenance, your ZODIAC Post Driver will provide you with many years of service.

- ➡ The ZODIAC Gas-Powered Post Driver is 100% self-contained. No other sources of power such as hydraulics or air compressors are required.
- ➡ Custom, center-bored reducer sleeves are available for ground rods, rebar, and other types of stakes. **DO NOT use without the correct size sleeve.**
- ➡ Be sure to read and understand the starting instructions for the Honda GX35 engine.
- ➡ Your Honda GX35 engine is inclinable, which means it is designed to operate at any angle.

⇒ For optimum performance, the machine is designed to be used with low-grade viscosity grease. We recommend Mobilux EP 0. Any other type of grease will be detrimental to the function of the machine.

ALWAYS FOLLOW THESE GUIDELINES BEFORE YOU START YOUR MACHINE!

- Add engine oil. **THE OIL IS NOT FILLED WHEN THE POST DRIVER IS ASSEMBLED.** Honda suggests adding less than 80 cm³ (2.7 US oz., 2.8 Imp. oz.), then checking. Add oil if required to fill to the bottom edge of the oil fill hole. Use 10W-30 oil. **DO NOT OVERFILL.** Always hold driver in upright position to check oil level. Proper oil level is essential for the correct operation of the post driver. Overfilling the oil will result in loss of power and could cause permanent damage to your engine.
- Check the fuel level. **USE UNLEADED FUEL WITH 86 OCTANE OR HIGHER ONLY.**
- Visually check the anvil and the barrel. Look up into the barrel for excessive debris or foreign objects.
- Check all fasteners and tighten as necessary. Follow torque requirements specified in the section of this manual titled *Reassembly*.
- **DO NOT** use your ZODIAC Post Driver if there is any damage or wear to any of the controls or safety devices.
- Be sure to use all recommended personal protective equipment.

SAFE STARTING

⇒ Place the machine on a secure, solid surface in an open area. Maintain a safe posture and balance. **DO NOT** start the driver anywhere except in an open, well-ventilated area. Never use your machine inside an enclosed building.

⇒ When you pull the starter grip, **DO NOT** wrap the starter rope around your hand or wrist. **DO NOT** allow grip to snap back, but rather guide the starter rope slowly back to permit rope to rewind properly. **DO NOT** extend the starter rope to its full length. Failure to follow this procedure may result in serious injury to hand or fingers, or may damage the starting mechanism.

⇒ 1°- Slide red thumb switch on the throttle to the “ON” position (if the engine is cold, close the choke).

- ➔ 2°- Press the priming bulb until fuel can be seen inside the fuel return line.
- ➔ 3°- Pull on the starter grip to start the engine, and gently return the starter grip to the normal position.

RESTARTING A HOT ENGINE

If the engine is operated at a high ambient temperature for a lengthy amount of time and then turned off to sit for a short time, it may not restart on the first pull.

⚠ IF NECESSARY, use the following procedure. Failure to do so may result in personal injury.

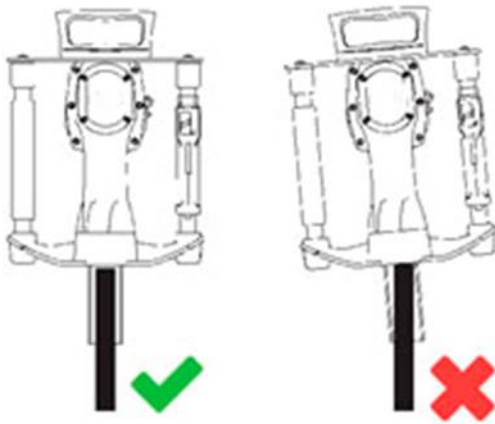
- Turn the engine switch to “OFF” position. This will prevent the engine from running at max speed.
- Move the choke lever to the “OPEN” position.
- Hold the throttle in max speed position.
- Pull the starter grip 3 to 5 times.
- Follow the safe starting procedures listed above, and start the engine with the choke in the “OPEN” position.

DRIVING A POST

Put on personal protective equipment as outlined in this manual.

Start the engine safely as outlined above.

Take a firm stance with weight evenly distributed on both feet. Keep both feet securely planted at a minimum of shoulder width apart. **ALWAYS** maintain a solid balance while driving posts.



Lift the post driver onto the post, and ensure that the driver is sitting level and the post is centered up in the barrel of the post driver. **If not aligned properly, you could cause damage to the machine or your post.**

See Figure 1. Post driver level example


Pull down on the machine handles to apply approximately 10-12 pounds of down-pressure to help the internal hammer mechanisms remain in the correct operating position. Once you are confident that the machine is being held level and the post is centered, gently engage the throttle trigger until the hammer

action is felt. When you are sure the post is moving down into the ground correctly, depress the throttle trigger fully, and drive your post down to the desired depth.

 **ALWAYS keep both hands on the driver, and maintain the 10-12 pounds of down-pressure while driving the post into the ground.**

Be sure the barrel of the driver does not come in contact with the ground. This will take the downpressure off the machine and may cause unnecessary damage to your driver.

When the post is at the desired depth, fully release the throttle trigger and gently slide the machine off the post. Move to the next post and repeat the above procedure. You can leave the engine idling, there is no need to repeatedly turn the engine on and off.

 **ALWAYS fully release the throttle trigger to stop the hammer action prior to removing from the post.**

REFUELING

Always turn the engine off and allow adequate time for it to cool before refueling. **USE UNLEADED FUEL WITH 86 OCTANE OR HIGHER ONLY.**

Fill the tank on level ground and avoid spilling the fuel on the motor. Always allow any spilled fuel to evaporate before restarting the engine.

Ensure the fuel cap is adequately tightened before restarting the engine.



NEVER refuel your driver with the engine hot, running, or in an unventilated area. Fuel vapors are extremely flammable and can cause severe injury or death if ignited by a spark or excessive heat from a hot engine.

SERVICE AND MAINTENANCE

The ZODIAC Gas-Powered Post Driver has been manufactured and designed to give you years of trouble-free post driving. Always refer to the Honda GX35 manual for service and maintenance guidelines on your engine. The following maintenance guidelines will keep your machine in top-performing condition.

Be sure to properly store your ZODIAC Post Driver. **DO NOT** lay it horizontally on the driver side or resting on the engine. The recommended method of storing is in an upright position, however, if this is not possible, place on a flat surface with the barrel and brush-guard supporting the machine at an angle, so that the top handle is the highest point.

If you are experiencing an issue with the Honda engine, please contact your local Honda dealer for parts and service. ZODIAC does not carry the engine parts for Honda, nor does ZODIAC determine the warranty, which is honored by Honda.

BEFORE EACH USE:

Check the engine oil level by holding the machine in an upright position. Lying the machine down to check the oil will give you a false reading. Use SAE 10W-30 oil to top off if necessary.

Check the engine air cleaner. If overly soiled, clean or replace.

Check all post driver fasteners and retighten if necessary. If you choose to reinstall any bolts with new Loctite, you must clean the bolt and the area of the bolt hole with parts cleaner to remove any grease residue. The Loctite will not be effective if grease is present. Follow any torque requirements.

Visually check the inside of the barrel and the anvil for any debris or foreign objects. Check for any fluid leaks.

FIRST 10 HOURS USE:

Change the engine oil following the guidelines in your Honda GX35 manual. Dispose of discarded oil in accordance with all local, state, and federal regulations. **DO NOT OVERFILL.** Always check the oil level by holding the machine in an upright position.

Check all engine and post driver fasteners and retighten if necessary. If you choose to replace or reinstall any bolts with new Loctite, follow the above listed guidelines pertaining to Loctite. Follow any torque requirements.

EVERY 3 MONTHS OR 25 HOURS OF USE:

Change the engine oil following the guidelines in your Honda GX35 manual. Dispose of discarded oil in accordance with all local, state, and federal regulations. **DO NOT OVERFILL.**

Replace air cleaner elements. This should be performed more often if your post driver is operated in dusty conditions.

Check all engine and post driver fasteners and retighten if necessary. If you choose to replace or reinstall any bolts with new Loctite, follow the above listed guidelines pertaining to Loctite. Follow any torque requirements.

EVERY 4 MONTHS OR 50 HOURS OF USE:

Remove the crank housing cover to check the EP 0 grease level. The crank area should look clean and grease should be visible around the crank area and top of

piston. There should be a ring of grease collected against the wall of the crank case.

If the ring of grease around the crank case wall measures less than ¼", it is an indication that the grease level is low. Add no more than a few tablespoons of EP 0 grease. You never want to exceed ½" of grease ring around the crank case walls.

⚠ DO NOT OVERFILL THE CRANK CASE WITH GREASE. This can damage the driver and Honda engine.

If the grease is very dark or black in color or full of debris, the driver will require further maintenance as detailed in the section of this manual titled *Servicing of the Hammer and Anvil*.

In the event of complete removal of old grease, the level of the fresh new grease should be to the bottom of the crank pin (approximately 3-4 tablespoons).



Grease ring example



New grease example (before any single use)

EVERY 12 MONTHS OR 250 HOURS OF USE:

Follow the above regularly scheduled maintenance guidelines for every 3 months or 25 hours of use.

Follow the above regularly scheduled maintenance guidelines for every 4 months or 50 hours of use.

Remove and service hammer and anvil according to guidelines in the section of this manual titled Servicing of Hammer and Anvil.



The amount and type of grease used in your ZODIAC Driver is critical for the performance and service life of your post driver. Not enough grease will cause failure, and too much grease will overburden the piston and affect the hammering power of the machine. Use only ZODIAC approved EP 0 grease, which is available from ZODIAC.

Replace all O-rings and housing seals.

If you are unsure of anything in this manual, please contact Zodiac

If you are experiencing performance issues with your ZODIAC Gas-Powered Post Driver, please refer to the section of this manual titled *Troubleshooting* for possible solutions, or contact ZODIAC for assistance.



ALWAYS reassemble your driver fasteners using LOCTITE BLUE 243. Remember to clean the fastener and the holes with a parts cleaner to remove all grease residue, or the Loctite will not be effective. .

SERVICING OF HAMMER AND ANVIL (REBUILD) BOTTOM DRIVER BODY

Wear eye protection

Remove the 6 bolts on the bottom half of the lower driver body. Be aware that the handle tubes have anti-vibration springs that are installed under tension. The damper assembly washer will sometimes be removed with the lower driver body, or it may remain in place in the upper driver body.

Remove the damper section and inspect the rubber O-rings and steel components for wear or debris.

! Take notice of the orientation of the damper assembly parts, as they must be oriented the same way when reinstalled.

Remove the anvil (hammer that hits the post). Locate the Viton O-ring and replace it at this time.

The anvil is made of high-quality, hardened-tool steel and should not show any signs of wear. Thoroughly clean the anvil.



View when lower driver body is removed



Damper assembly, hammer and anvil

TOP DRIVER BODY

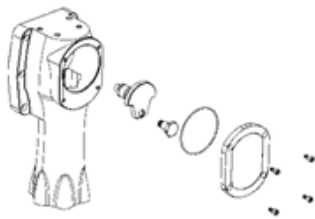
Wear eye protection

To remove the hammer, gently tap the main cast housing vertically down on a soft bench top, and it should slide out of the barrel. Locate the Viton O-ring and replace it at this time. The hammer is made of high-quality, hardened-tool steel and should not show any signs of wear. Thoroughly clean the hammer.

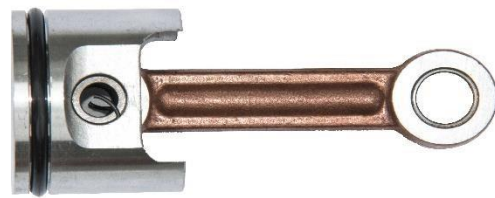
To remove the piston and connecting rod, you will need to remove the **LEFT-HAND THREAD** crank pin from the crank, and gently push the piston through the bottom of the housing. To access the crank pin, see the guidelines listed above in the section of this manual titled *Service & Maintenance*.

 Use caution when holding the connecting rod and crankshaft as to not damage these components.

Clean and inspect the piston and connecting rod. Insert the crank pin into the bearing on the connecting rod to check for fit. If there is excessive play or side-to-side movement, it is possible you may need to replace the crank pin. Check the movement in the bearing in the piston side. If there is excessive play, the connecting rod should be replaced. Locate the Viton O-ring on the piston and replace it at this time.



Location of left-hand crank pin



Piston with connecting rod in place

Clean and inspect the cylinder and crank case for any damage or excessive wear. Replace any damaged parts you may identify.

Remove the inner springs of the handle to clean and lubricate each one. Check all handle cups for any excessive wear. Clean and lubricate the upper and lower cups.

REASSEMBLY

After thoroughly cleaning and drying the hammer components and the cylinder, reassembly can be done.

Wear eye protection


Apply a wipe of EP 0 grease around the O-ring and outside of the piston and gently push back into the housing using a soft dolly.

Add a small amount of EP 0 grease to the crank pin and reassemble. Remember it is lefthand thread. Torque the crank pin to 228 inch-pounds. **DO NOT OVERTIGHTEN THIS PIN.**

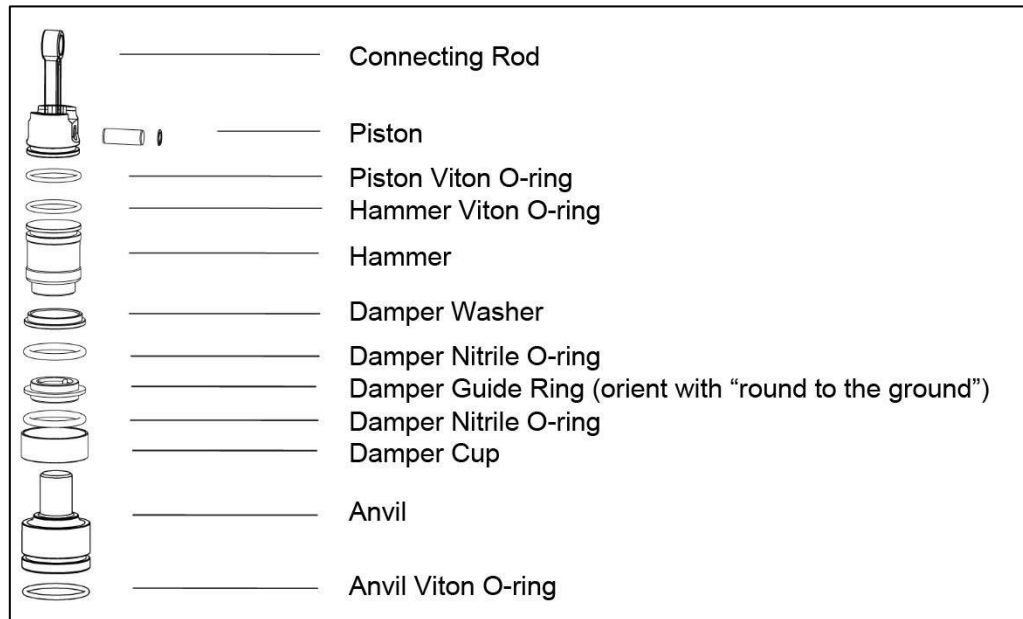
Add a wipe of EP 0 grease to the outside of the hammer and gently push into the housing with the O-ring toward the top.

For the anvil section, add a wipe of EP 0 grease to the anvil, and push the anvil into the guide tube.

Reassemble the damper assembly with a small amount of EP 0 grease to all components.

 **The hammer guide ring should be oriented correctly so the side with the large chamfer (slightly rounded edge) is facing down toward the anvil. Remember, round to the ground.**

View of the orientation of internal parts



Install the metal damper washer back over the anvil.

Install the bottom guide section back into the main housing. Be sure to install the new bottom housing O-ring.

Insert the anti-vibration springs back into the handlebars and reinstall into the upper and lower handle cups. When parts are inserted correctly, there will be resistance from the springs to seat the lower driver body. This is normal.

Reinstall the bottom housing bolts with new Loctite. You must clean the bolt and the area of the bolt hole with parts cleaner to remove any grease residue. The Loctite will not be effective if grease is present. Torque these bolts to 132 inch-pounds.

Add approximately 4 tablespoons of new EP 0 grease to the crank area and reinstall the crank cover bolts with new Loctite. You must clean the bolt and the area of the bolt hole with parts cleaner to remove any grease residue. The Loctite will not be effective if grease is present.



All screws should be correctly tightened in an alternate pattern as machine damage will occur from loose or lost bolts due to improper installation.

Please contact ZODIAC directly at info@Zodiac.com if you need parts or have any servicing questions.

TROUBLESHOOTING

If your driver sounds like it is running fine, but the anvil is not hammering as it should, make sure your anvil is fully engaged. There is a safety that will disengage the anvil if it is dry-fired or misfired. To re-engage the anvil, simply pick the driver up off the post, and place it back down on the post with a bit of force to hit the anvil against the post. **AVOID REPEATED DRY-FIRE** by maintaining 10-12 pounds of down-pressure at all times.

Check the type of grease in the crank. **WE RECOMMEND USING ONLY EP 0 GREASE.** EP 0 is a low-viscosity grease for machinery with rapid moving parts that produce a lot of friction. If you use a different type of grease, you will inhibit the performance of your driver and possibly cause damage to your driver or your engine. If you have greased your driver with the wrong grease, you will need to follow the instructions in the section of this manual titled *Service and Maintenance* for replacing grease in the crank housing area.

Check the amount of grease in the crank case. If your driver is over-greased, it will cause a reduced performance of the machine and put undue stress on the engine and the operations of the gears and piston in the machine. There should be approximately 4-5 tablespoons of grease visible in the crank housing. There has to be room for freedom of movement for the parts.

If your driver is low on grease, it will cause a reduced performance of the machine. Open the crank housing cover to visually check the amount of grease

in your driver. You should always see a bit of grease residue moving throughout the machine. You may even see grease left on the posts. This is a good thing. It means your machine is self-lubricating.

If you feel that the anvil or hammer of the machine is not moving as freely as it should, you can spray WD-40 up into the barrel to lubricate and cleanse this area. Occasionally you will get bits of debris which chip off the posts and make their way up into the anvil area.

If your engine seems to be overheating and not operating as it should, it may be starving for air or have too much pressure built up. You can remedy this by a simple puncture hole in the breather of your gas cap. Unscrew the gas cap and remove the black plastic top to reveal a rubber gasket in the white liner part of the gas cap. Use a paperclip or similar small, sharp item to puncture a hole in the black rubber in the middle of breather hole, reinstall the black plastic top cover and screw the gas cap back into place.

In the event that a driven posts flares and becomes lodged within the barrel, follow these steps:

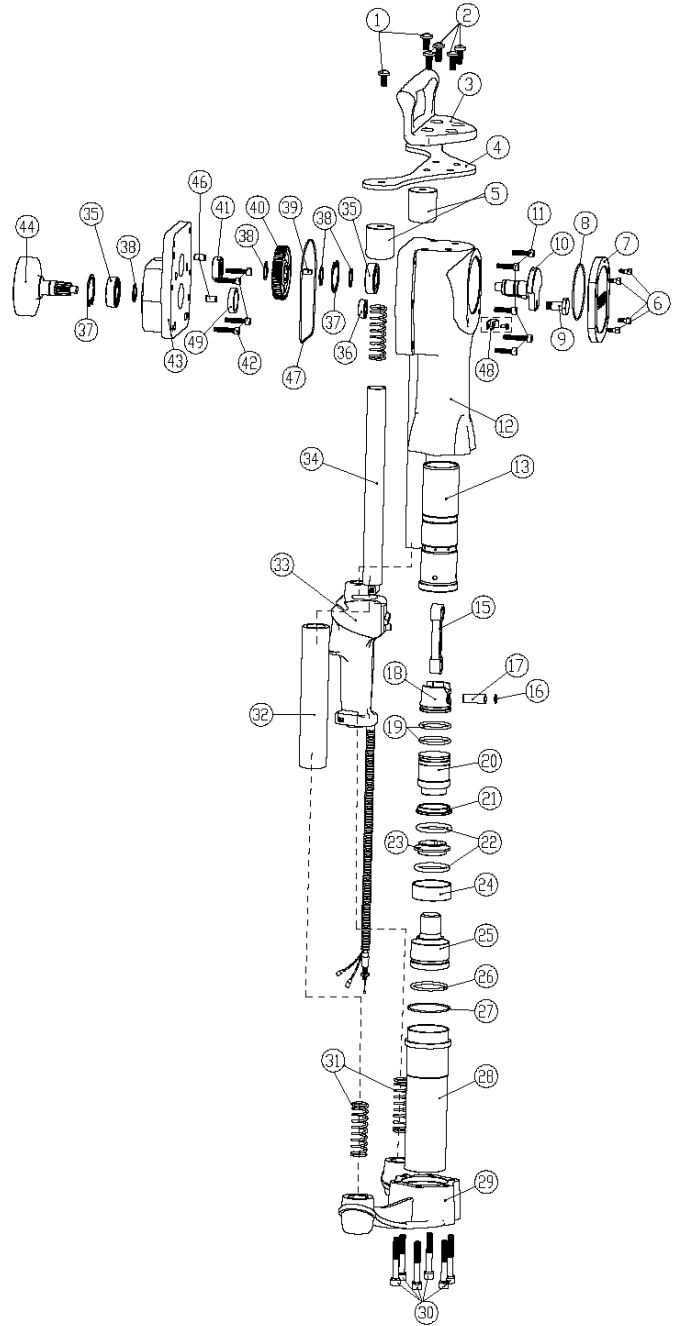
- Remove the 6 lower body bolts to separate the lower driver body from the upper driver body.
- Slide the lower driver body down the post to expose the flared top of the post. With a proper cutting tool for that type of post, cut the post off just below the flared top.
- Once the flared top is removed, slide the lower driver body off the post and reassemble it to the upper driver body. Follow the bolt tightening and Loctite guidelines explained in the section of this manual titled *Reassembly*.

If you are experiencing an issue with the Honda engine, please contact your local Honda dealer for parts and service. ZODIAC does not carry the engine parts for Honda, nor does ZODIAC determine the warranty, which is honored by Honda.

If none of the steps above address your issue, please call ZODIAC at info@Zodiac.com for further assistance.

ZPD-52 PARTS DIAGRAM

Part N°	Part Name	Qty.
MPD-1	M8*15 BOLTS	2
MPD-2	M8*20 TOP HANDLE BOLTS	4
MPD-3	UPPER HANDLE	1
MPD-4	FIXED PLATE	1
MPD-5	HANDLE CUP	2
MPD-6	M5*15 HEXAGONAL BOLTS	4
MPD-7	COVER FOR CRANKCASE	1
MPD-8	O-Ring 76*2.65	1
MPD-9	CRANK PIN	1
MPD-10	CRANK SHAFT	1
MPD-11	M6*30 HEXAGONAL BOLTS	6
MPD-12	POST DRIVER BODY	1
MPD-13	CYLINDER	1
MPD-14	CONNECTING ROD WASHER	1
MPD-15	CONNECTING ROD	1
MPD-16	12 RETAINER	1
MPD-17	WRIST PIN 12*32	1
MPD-18	PISTON	1
MPD-19	O-Ring 37.5*3.5	2
MPD-20	HAMMER	1
MPD-21	DAMPER WASHER	1
MPD-22	O-Ring 40*5.3	2
MPD-23	DAMPER GUIDE RING	1
MPD-24	DAMPER CUP	1
MPD-25	ANVIL	1
MPD-26	O-Ring 45*3.5	1
MPD-27	O-Ring 56*2.65	1
MPD-28	CHUCK TUBE	1
MPD-29	LOWER DRIVER BODY	1
MPD-30	M8*60 HEXAGONAL BOLTS	6
MPD-31	HANDLE ANTIVIBRATION SPRING	4
MPD-32	HANDLE CUSHION	1
MPD-33	SWITCH	1
MPD-34	HANDLE TUBE	2
MPD-35	6004-2RS BEARING	2
MPD-36	6000-2RS BEARING	1
MPD-37	42 RETAINER	2
MPD-38	20 RETAINER	4
MPD-39	KEY 6*6*12	1
MPD-40	GEAR	1
MPD-41	6201-2RS BEARING	1
MPD-42	M6*30 HEXAGONAL BOLTS	4
MPD-43	CLUTCH HOUSING	1
MPD-44	CLUTCH DRUM	1
MPD-45	- - -	0
MPD-46	ALIGNMENT PIN	2
MPD-47	GASKET	1
MPD-48	CLAMP WITH SCREW	1
MPD-49	OIL SEAL	1



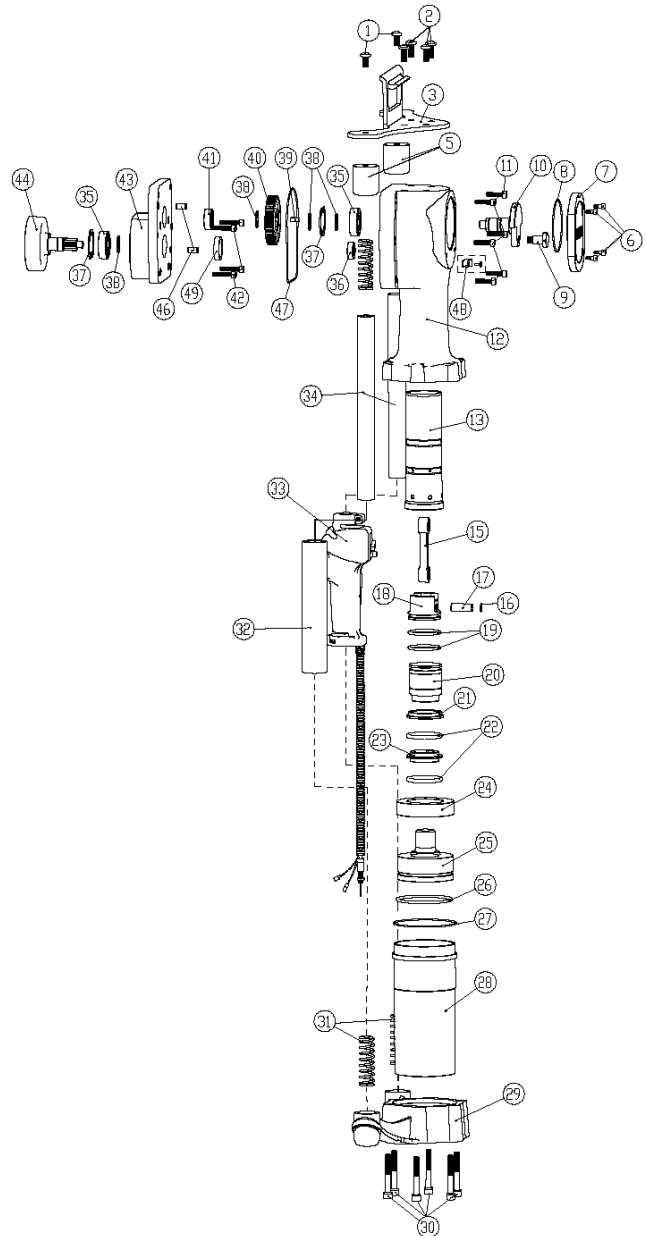
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ENGLISH

ZPD-82 PARTS DIAGRAM

ENGLISH

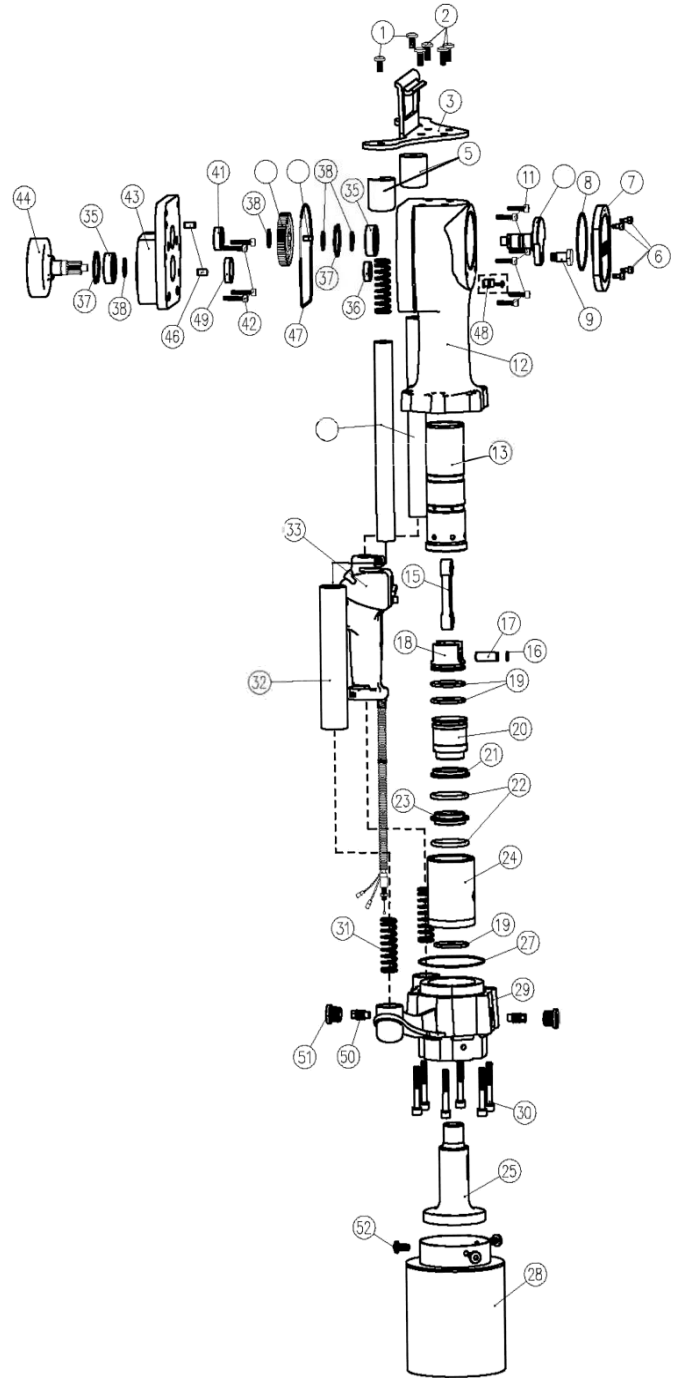
Part N°	Part Name	Qty.
WPD-1	M8*15 BOLTS	2
WPD-2	M8*20 TOP HANDLE BOLTS	4
WPD-3	UPPER HANDLE	1
WPD-4	- - -	1
WPD-5	HANDLE CUP	2
WPD-6	M5*15 HEXAGONAL BOLTS	4
WPD-7	COVER FOR CRANKCASE	1
WPD-8	O-Ring 76*2.65	1
WPD-9	CRANK PIN	1
WPD-10	CRANK SHAFT	1
WPD-11	M6*30 HEXAGONAL BOLTS	6
WPD-12	POST DRIVER BODY	1
WPD-13	CYLINDER	1
WPD-14	CONNECTING ROD WASHER	1
WPD-15	CONNECTING ROD	1
WPD-16	12 RETAINER	1
WPD-17	WRIST PIN 12*32	1
WPD-18	PISTON	1
WPD-19	O-Ring 42.5*3.8	2
WPD-20	HAMMER	1
WPD-21	DAMPER WASHER	1
WPD-22	O-Ring 44*5.3	2
WPD-23	DAMPER GUIDE RING	1
WPD-24	DAMPER CUP	1
WPD-25	ANVIL	1
WPD-26	O-Ring 78*3.8	1
WPD-27	O-Ring 92*2.65	1
WPD-28	CHUCK TUBE	1
WPD-29	LOWER DRIVER BODY	1
WPD-30	M8*60 HEXAGONAL BOLTS	6
WPD-31	HANDLE ANTIVIBRATION SPRING	4
WPD-32	HANDLE CUSHION	1
WPD-33	SWITCH	1
WPD-34	HANDLE TUBE	2
WPD-35	6004-2RS BEARING	2
WPD-36	6000-2RS BEARING	1
WPD-37	42 RETAINER	2
WPD-38	20 RETAINER	4
WPD-39	KEY 6*6*12	1
WPD-40	GEAR	1
WPD-41	6201-2RS BEARING	1
WPD-42	M6*30 HEXAGONAL BOLTS	4
WPD-43	CLUTCH HOUSING	1
WPD-44	CLUTCH DRUM	1
WPD-45	- - -	0
WPD-46	ALIGNMENT PIN	2
WPD-47	GASKET	1
WPD-48	CLAMP WITH SCREW	1
WPD-49	OIL SEAL	1



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ZPD-100/136 PARTS DIAGRAM

Part N°	Part Name	Qty.
SPD-1	M8*15 BOLTS	2
SPD-2	M8*20 TOP HANDLE BOLTS	4
SPD-3	UPPER HANDLE	1
SPD-4	- - -	1
SPD-5	HANDLE CUP	2
SPD-6	M5*15 HEXAGONAL BOLTS	4
SPD-7	COVER FOR CRANKCASE	1
SPD-8	O-Ring 76*2.65	1
SPD-9	CRANK PIN	1
SPD-10	CRANK SHAFT	1
SPD-11	M6*30 HEXAGONAL BOLTS	6
SPD-12	POST DRIVER BODY	1
SPD-13	CYLINDER	1
SPD-14	CONNECTING ROD WASHER	1
SPD-15	CONNECTING ROD	1
SPD-16	12 RETAINER	1
SPD-17	WRIST PIN 12*32	1
SPD-18	PISTON	1
SPD-19	O-Ring 42.5*3.8	2
SPD-20	HAMMER	1
SPD-21	DAMPER WASHER	1
SPD-22	O-Ring 44*5.3	2
SPD-23	DAMPER GUIDE RING	1
SPD-24	DAMPER CUP	1
SPD-25	ANVIL	1
SPD-26	O-Ring 78*3.8	1
SPD-27	O-Ring 92*2.65	1
SPD-28	CHUCK TUBE	1
SPD-29	LOWER DRIVER BODY	1
SPD-30	M8*60 HEXAGONAL BOLTS	6
SPD-31	HANDLE ANTIVIBRATION SPRING	4
SPD-32	HANDLE CUSHION	1
SPD-33	SWITCH	1
SPD-34	HANDLE TUBE	2
SPD-35	6004-2RS BEARING	2
SPD-36	6000-2RS BEARING	1
SPD-37	42 RETAINER	2
SPD-38	20 RETAINER	4
SPD-39	KEY 6*6*12	1
SPD-40	GEAR	1
SPD-41	6201-2RS BEARING	1
SPD-42	M6*30 HEXAGONAL BOLTS	4
SPD-43	CLUTCH HOUSING	1
SPD-44	CLUTCH DRUM	1
SPD-45	- - -	0
SPD-46	ALIGNMENT PIN	2
SPD-47	GASKET	1
SPD-48	CLAMP WITH SCREW	1
SPD-49	OIL SEAL	1
SPD-50	LIMIT PIN OF ANVIL	2
SPD-51	M20*1.5 HEXAGONAL SEALING PLUG	2
SPD-52	M8*15 BOLTS	3



TECHNICAL SPECIFICATIONS

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MODEL	ZPD-52	ZPD-82	ZPD-100/136
Nozzle diameter	52mm	82mm	96-136mm
Impact strength	1100Kgf/2240Lbf	1600Kgf/3550Lbf	1600Kgf/3550Lbf
Impact energy	26 Joules	36 Joules	36 Joules
Weight	15 Kg	18 Kg	19.5 Kg
Engine	HONDA GX35, 4 Strokes, 36cc OHC		
Power	1 KW (1.5 CV) at 7.000 rpm		
Vibration levels	9.94 m/s ²		
Fuel consumption	0.65 L/h (máx 7.000 rpm)		
Noise levels	>90dB (acoustic protection required)		
Throttle system	Dual security throttle with integrated STOP		
Handle system	Ergonomical handles with spring isolation		
Hammering speed	1.720 BPM (28 beats per second)		

