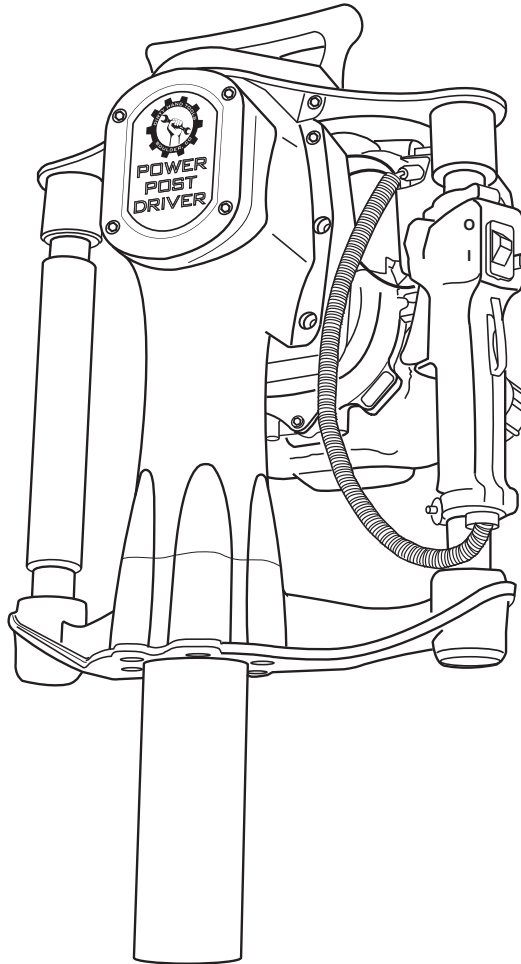




**DIRTY HAND
TOOLS**

POWER POST DRIVER



MODELS # 103400 & 104369

Operation Manual



This safety alert symbol identifies important safety messages in this manual. Failure to follow this important safety information may result in serious injury or death.

Part # 104615 Rev B

Designed & Engineered in Colorado, USA



Assembled with Foreign & Domestic Components

For Service or Questions

Call 1-877-487-8275

720-287-5182

www.dirtyhandtools.com

Dirty Hand Tools® is a brand of



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Important Safety Information



WARNING

WARNING: Read and thoroughly understand all instructions and safety information before assembling or operating this Power Post Driver. Failure to do so may cause serious injury or death. Do not allow anyone to operate this equipment who has not read this manual. As with all power equipment, a Power Post Driver can be dangerous if assembled or used improperly. Do not operate this equipment if you have doubts or questions concerning safe operation.

Call our customer service department at **720-287-5182**, **1-877-487-8275**, or visit www.dirtyhandtools.com if you have any questions or concerns about the safe operation of this equipment.



DANGER

Intended Use

Do Not Use the Power Post Driver for any purpose other than for which it was designed. The Power Post Driver was designed to drive fence posts, ground rods, form pins, and other similar items into the ground. Any other use is unauthorized and may result in serious injury or death.

Personal Protective Equipment

When operating this Power Post Driver it is essential that you wear safety gear including goggles or safety glasses, adequate clothing and tight fitting gloves. Always wear ear plugs or sound deafening headphones to protect against hearing loss when operating this Power Post Driver. Always wear sturdy footwear. Never wear sandals, sneakers or open shoes, and never operate the Power Post Driver with bare feet. Bystanders should wear safety glasses and hearing protection while in the presence of this power tool during operation.



CAUTION

Whenever you leave the operation position to raise or position a fence post or make other adjustments always shut off the engine.

Important Safety Information

General Safety

Failure to follow warnings, cautions, assembly and operation instructions in the Operation Manual may result in serious injury or death.



DANGER

READ THE OPERATION MANUAL BEFORE OPERATION.

- **Do not** permit children to operate this equipment at any time. Do not permit others that have not read and understood the complete Operation Manual to operate this equipment.
- Keep all people and pets away from the work area when operating the Power Post Driver.
- **Do not** operate the Power Post Driver when under the influence of alcohol, drugs or medication.
- **Do not** allow a person who is tired or otherwise impaired or not completely alert to operate the Power Post Driver.



DANGER

ALWAYS CHECK FOR THE PRESENCE OF UNDERGROUND UTILITIES BEFORE USING THE POWER POST DRIVER

- Always operate the Power Post Driver in the vertical position.
- Never use the Power Post Driver inside a contained area, exhaust produced as Carbon Monoxide is a dangerous poison.
- Never, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on the Power Post Driver.
- Improper maintenance could lead to serious injury.
- Always use two hands and grip the Power Post Driver firmly when operating.

Important Safety Information

- Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless, and deadly poisonous gas.
- Fill the gasoline tank outdoors with the engine off and allow the engine to cool completely.
- Do not operate the engine with the air cleaner or cover over the carburetor air-intake removed, except for adjustment. Removal of such parts could create a fire hazard.
- The muffler and engine become very hot with use and can cause a severe burn; do not touch. Allow the engine to cool before refueling, doing maintenance, or making adjustments.

Safety Decals

Safety labels on the brush mower are to remind you of important information while you are operating the unit. Make sure all safety warning decals are attached and in readable condition. Replace missing or defaced decals. Contact Dirty Hand Tools at **1-877-487-8275** for replacement decals.



Pre-Operation Check



1. Visually inspect your Power Post Driver before use. The interior of the chuck tube should be checked for obstructions, damage or wear to the chuck tube and anvil inside. The outer surfaces of the driver should also be inspected for any defects.
2. Do not use the Power Post Driver if there is any damage or wear until the damage or wear is corrected and repaired.
3. Check all fluid levels, i.e. engine oil and fuel and fill as needed as per manufacturer's specifications. Proper oil level is essential to the proper operation of the Power Post Driver.



WARNING

THE POWER POST DRIVER IS SHIPPED WITHOUT FLUIDS. OIL MUST BE ADDED TO THE ENGINE BEFORE STARTING.

Overfilling of the oil will result in loss of power and may cause permanent damage to the engine.



WARNING

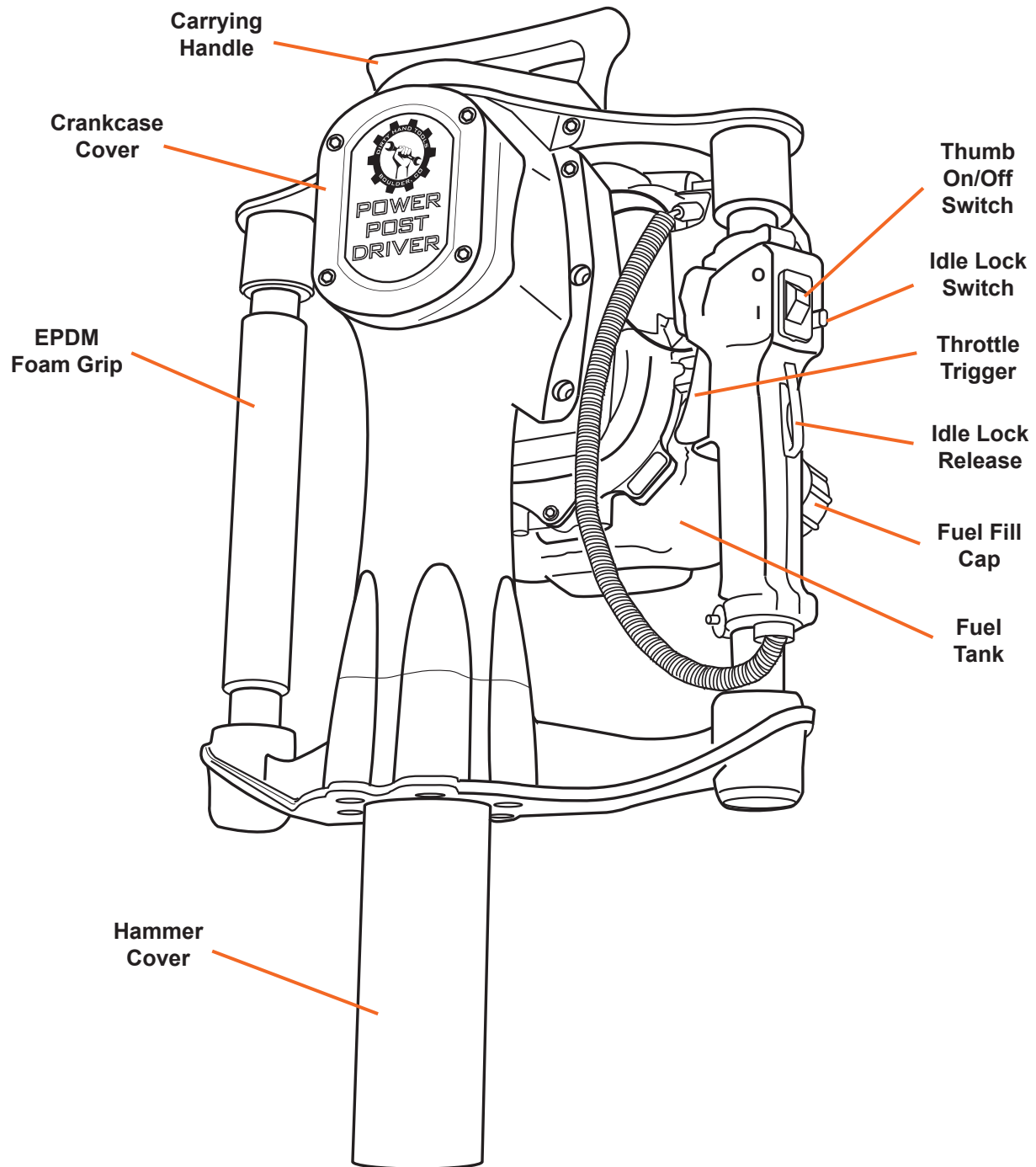
USE ALL RECOMMENDED SAFETY EQUIPMENT.

4. Secure the driver on a solid surface, i.e. tailgate, bench, or clear, solid ground and position your body in a safe position. **DO NOT** start the driver anywhere but an open, well-ventilated area. It is recommended that the Power Post Driver only be used outdoors and never inside an enclosed building.

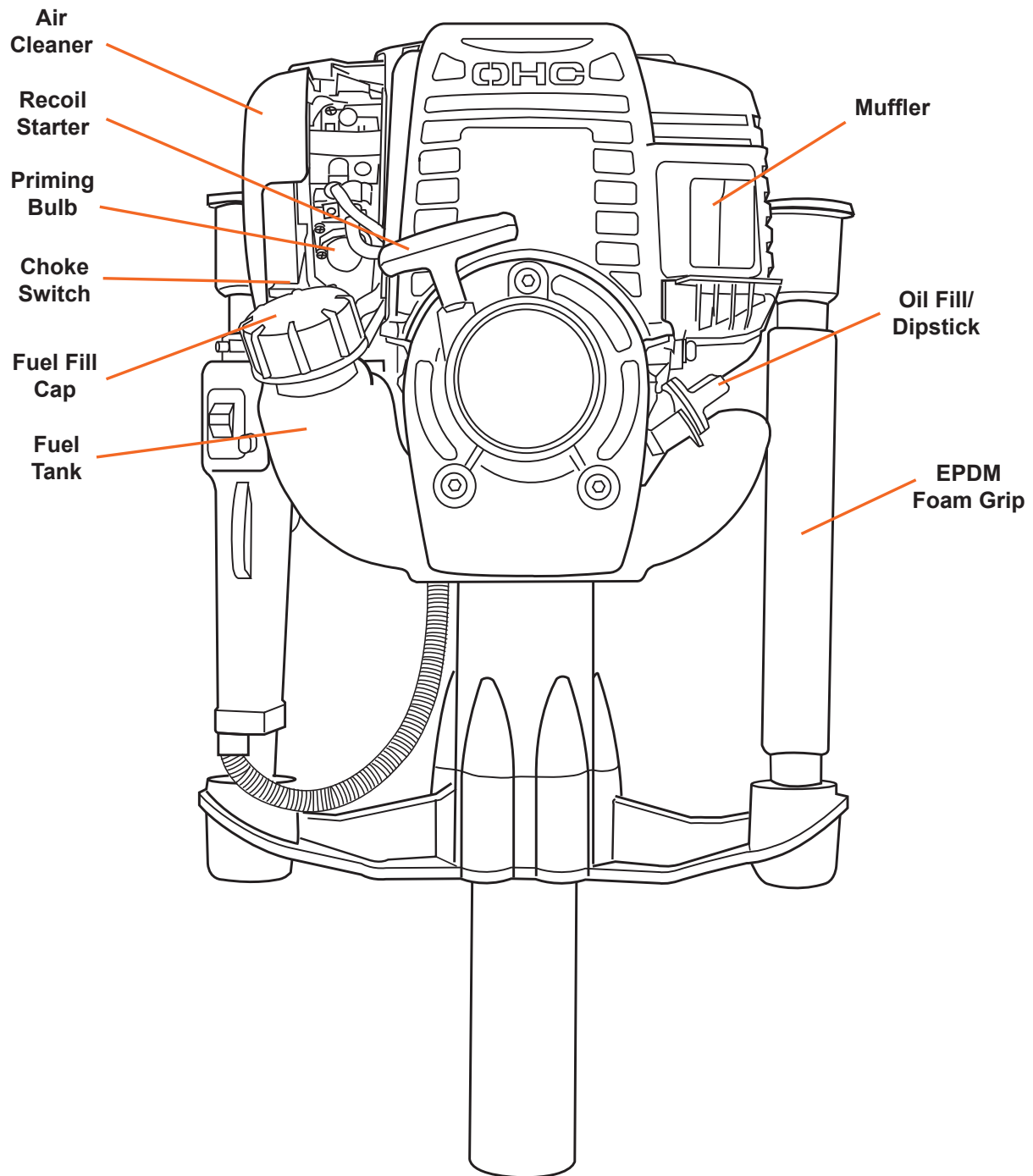


**DIRTY HAND
TOOLS**

Power Post Driver Overview



Power Post Driver Overview



Filling with Gasoline and Oil



WARNING

ADD OIL BEFORE STARTING THE ENGINE

The Power Post Driver is shipped without fluids installed.

Keep the caps on the fuel and oil fills until you are ready to pour either gasoline or oil into the correct fill.

1. Place the machine on a level surface, add some SAE 10-30W engine oil into the oil fill and wait one minute for the oil to settle, then continue filling with oil.
2. Check the dipstick and continue adding oil a little at a time, rechecking the dipstick until the oil reaches the fill mark. Be careful not to overfill.
3. Fill the fuel tank with fresh, unleaded gas (min. 85 Octane), to 1/4" from the top of the fill neck to allow for expansion. Be careful not to overfill and reinstall the cap before starting.



WARNING

**ALWAYS FILL THE TANK WITH
ENGINE OFF AND COOL.**

**ALWAYS CHECK THE OIL LEVEL
BEFORE OPERATING.**

Allow the engine to cool for at least two minutes before removing the fuel cap.

Before performing any adjustments to the Power Post Driver or any maintenance, stop the engine, wait five minutes to allow parts to cool.

Starting the Engine

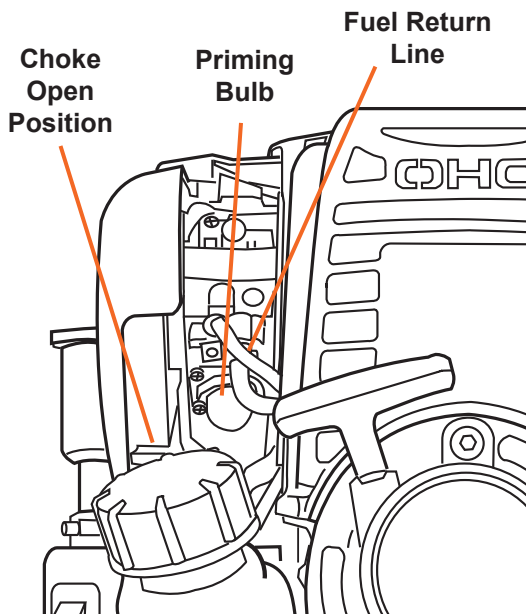


Figure 1

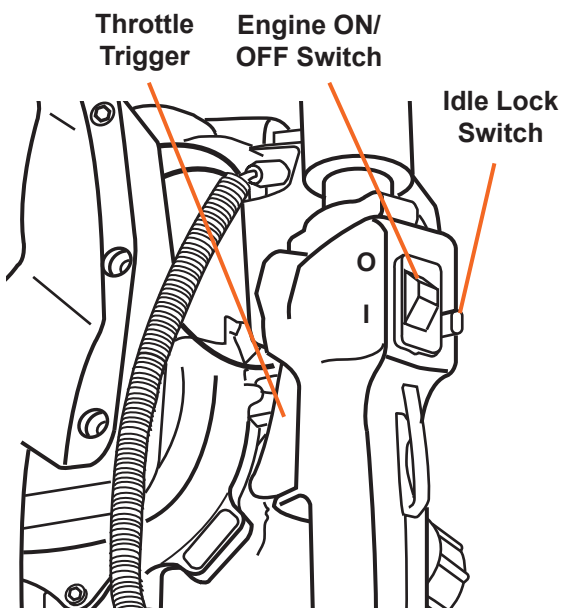


Figure 2

Starting the Engine

1. To start a COLD engine, move the choke lever upwards to the CLOSED position (see Figure 1). Lock the throttle by depressing the trigger and while the trigger is depressed, push in the button next to the thumb switch. Hold the button in and release the trigger. The throttle is now in the high idle position (see Figure 2).
2. To start a WARM engine, move the choke lever downwards to the OPEN position and do not lock the throttle into the high idle position.
3. Press the priming bulb repeatedly until fuel can be seen in the clear-plastic fuel return tube (see Figure 1).
4. Slide the engine ON/OFF switch on throttle handle down or into the ON position. Grasp the recoil starter handle and pull lightly until you feel resistance, then pull quickly towards you and return the recoil starter slowly. To prevent damage to the starter, do not allow the recoil starter cord to snap back against the engine.
5. If the choke lever was moved to the CLOSED position to start the engine, gradually move it to the open position as the engine warms up. As the engine warms up also release the high idle lock slightly depressing the trigger and then immediately releasing it. Use caution as to not engage the clutch.



WARNING

TO PREVENT PERSONAL INJURY OR DAMAGE TO THE POST DRIVER TURN THE ENGINE TO THE OFF POSITION BEFORE FOLLOWING THE RESTARTING A HOT ENGINE PROCEDURE

Restarting a Hot Engine

If the engine is operated at high ambient temperature, then turned off and allowed to sit for a short period, it may not restart on the first pull of the recoil starter. Follow the following

1. Turn the engine switch to the OFF (see Figure 2).
2. Move the choke lever to the OPEN position (see Figure 1).
3. Hold the throttle trigger in the MAX speed position.
4. Pull the recoil starter handle 3 to 5 times.
5. Follow the *Starting the Engine* instructions above with the choke lever in the OPEN position.

Operation

Driving a T-Post

1. Have an assistant hold the t-post in the desired horizontal position or manually drive the t-post into the ground a short distance, so that it is free standing upright.
2. With the engine running, position the post driver over the top of the t-post, gripping the handles firmly (see Figure 3).
3. The Power Post Driver should be positioned at the same angle as the t-post that it will be driving (see Figure 4).
4. Apply steady downward pressure to the handles while depressing the throttle trigger slightly to engage the clutch and hammer.
5. Once you are confident that the post is driving into the ground straightly, depress the throttle trigger fully to operate at maximum speed until the post is driven to the desired depth.

NOTE: Using a level will help ensure driving the post into the ground at a perpendicular angle.

6. Release the throttle trigger dropping the engine RPM back to idle before removing from the post.
7. When the engine has returned to idle, proceed to the next post repeating the steps outlined above.



Figure 3

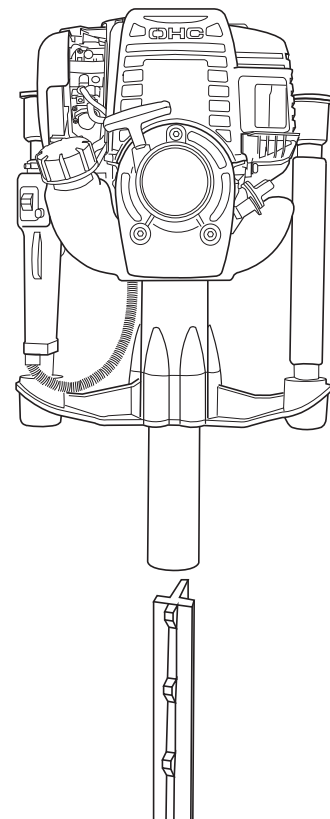


Figure 4

Maintenance



WARNING

BEFORE PERFORMING ANY MAINTENANCE PROCEDURE STOP THE ENGINE, WAIT FIVE (5) MINUTES TO ALLOW ALL PARTS TO COOL.

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's owner's manual for maintenance procedures.

Maintenance Checklist

Maintenance Procedure	Before Each Use	After 10 Hours	Every 25 Hours	Every 50 Hours	Every 250 Hours
Check Engine Fuel Level	X	X	X	X	
Check and Tighten all Fasteners	X				
Check Air Cleaner	X				
Clean/Replace Air Cleaner*			X		
Change Engine Oil**		X	X		
Check Crankshaft & Piston lubrication				X	
Remove/Service Hammer and Anvil					X

* Clean/change air filter more frequently if in dusty environment

** After the first 10 hours of operation change the engine oil, thereafter every 25 hours of operation

Maintenance

Checking the Engine Oil

Check the engine oil level before each use, or every 10 hours if operated continuously. Check the engine oil level with the engine stopped and in a level position.

1. Remove the oil fill cap/dipstick and wipe it clean with a paper towel (see Figure 5).
2. Insert and remove the oil filler cap/dipstick without screwing it into the oil filler neck, then remove it to check the oil level shown on the dipstick.
3. If the oil level is near or below the lower limit mark on the dipstick, fill to the bottom edge of the oil fill hole with SAE 10-30W engine oil. See the SAE Viscosity Chart for other oil weights and temperatures (see Figure 6). To avoid overfilling or underfilling, be sure the engine is in a level position while adding oil.
4. Reinstall the oil filler cap/dipstick and tighten securely.

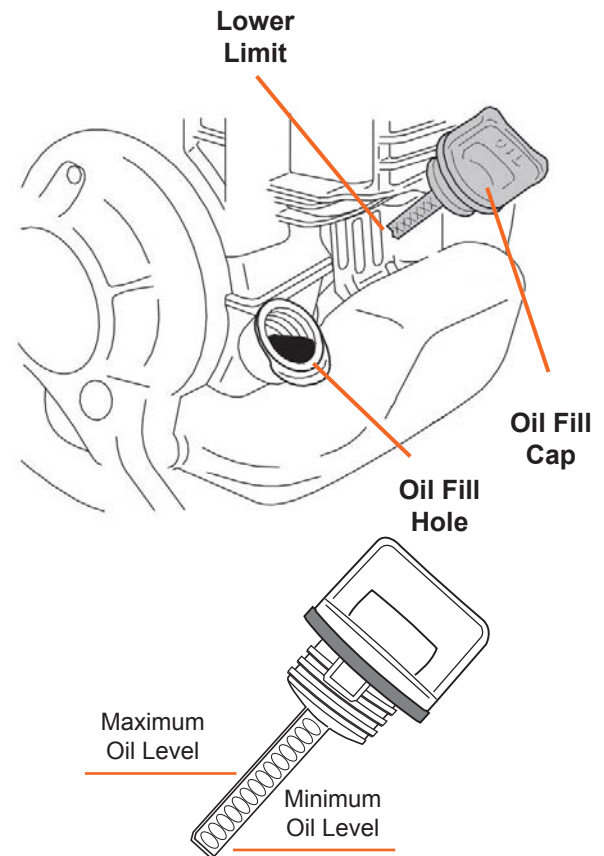


Figure 5

Changing the Engine Oil

1. Allow the engine to cool slightly. The engine oil will flow more quickly when still warm. Be careful of draining hot oil.
2. Remove the oil fill cap, invert the power driver and carefully drain the engine oil into an approved container for disposal.
3. Return the power driver to its upright position on a level surface.
4. Some oil will remain in the engine after draining. When refilling with fresh oil, start with about 2 ounces. Slowly add SAE 10-30W engine oil into the oil fill and wait one minute for the oil to settle, then continue filling with oil. Slowly add enough oil to fill to the bottom edge of the oil fill hole (see Figure 5).
5. Replace the dipstick. Be careful not to overfill.

SAE VISCOSITY GRADES

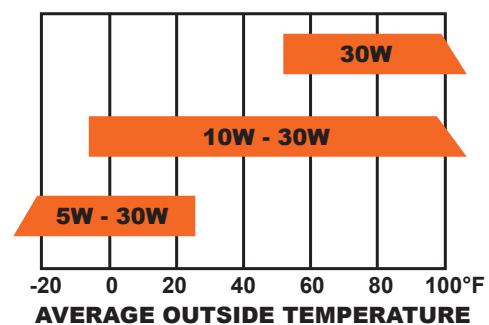


Figure 6

Maintenance

Replacing the Air Cleaner (Model 104369 - Honda Engine)

1. Press the latch tab on the top of the air cleaner cover and remove the cover (see Figure 7).
2. Inspect the air cleaner filter. Clean or replace dirty air filter. Always replace damaged air filter. Reinstall the air filter and air cleaner cover.

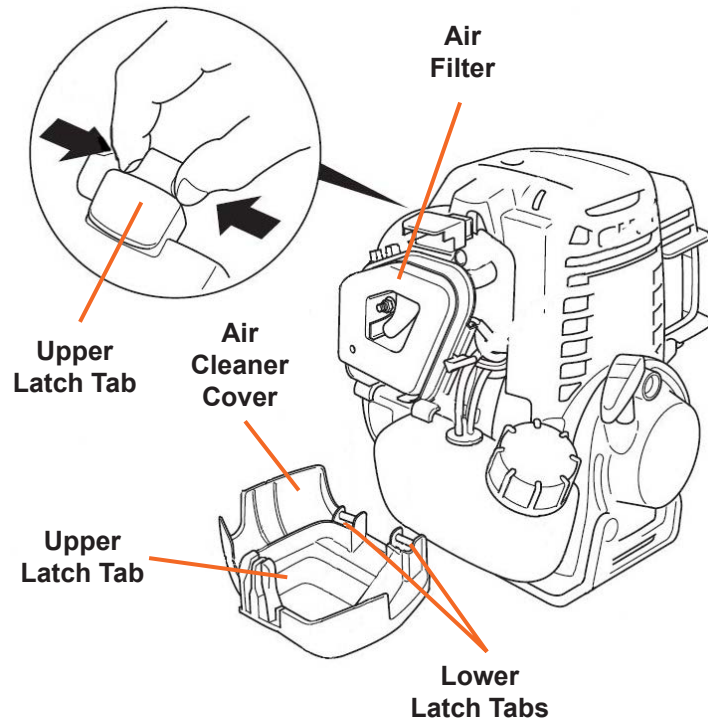


Figure 7

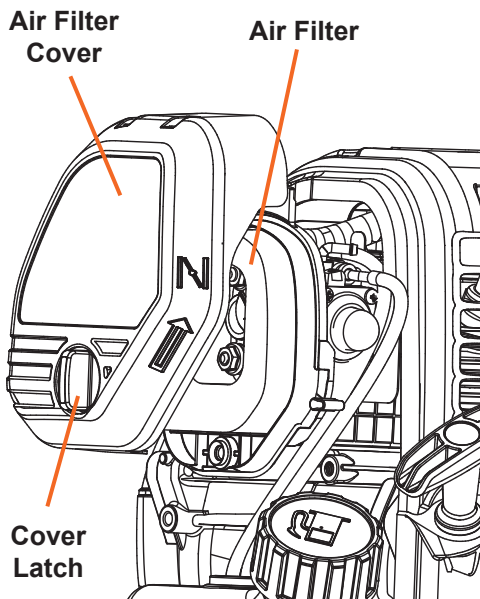


Figure 8

Replacing the Air Cleaner (Model 103400 - DHT Engine)

1. Loosen the air filter cover latch (see Figure 8).
2. Set the air filter cover aside.
3. Remove the air filter.
4. Carefully clean the air filter with hot water and a mild detergent, squeeze the water out and allow to dry. Soak the filter in fresh oil, squeeze the excess oil out and replace in the filter housing.
5. Re-install the air filter cover.



WARNING

To avoid personal injury or damage to the engine
do not run the engine without an air filter.

Maintenance

Changing/Cleaning the Spark Plug

The recommended spark plug is the correct heat range for normal engine operating temperatures. An incorrect spark plug can cause engine damage.

Recommended Spark Plug: CM5H (NGK), CMR5H (NGK)

1. Remove the hex bolt on top of the engine cover (remove two hex bolts on the top of the cover on the DHT engine model) and slide the cover off (see Figure 9). Disconnect the spark plug cap, and remove any dirt from around the spark plug area. Remove the spark plug with a 5/8-inch spark plug wrench (see Figure 10).
2. Inspect the spark plug. Replace it if damaged or badly fouled, if the sealing washer is in poor condition, or if the electrode is worn. Measure the spark plug electrode gap with a wire-type gauge. For good performance, the spark plug must be properly gapped and free of deposits. Correct the gap, if necessary, by carefully bending the side electrode. Gap should be: 0.60-0.70 mm (0.024-0.028 in)
3. Install the spark plug carefully, by hand, to avoid cross-threading. After the spark plug is seated, tighten with a 5/8-inch spark plug wrench to compress the sealing washer. When installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer.
4. When reinstalling the original spark plug, tighten 1/8 - 1/4 turn after the spark plug seats to compress the washer. A loose spark plug can overheat and damage the engine. Overtightening the spark plug can damage the threads in the cylinder head.
5. Attach the spark plug cap to the spark plug. Reconnect the spark plug cap.
6. Install the top cover, and tighten the 5mm hex bolt securely.

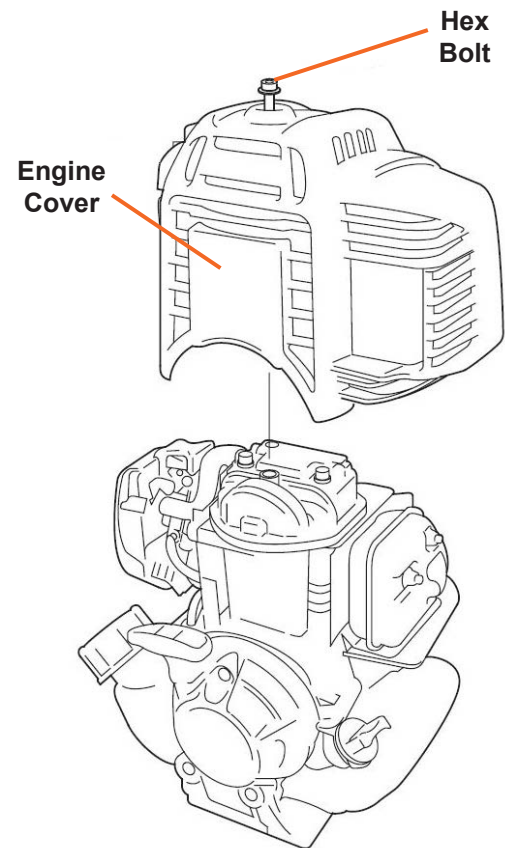


Figure 9

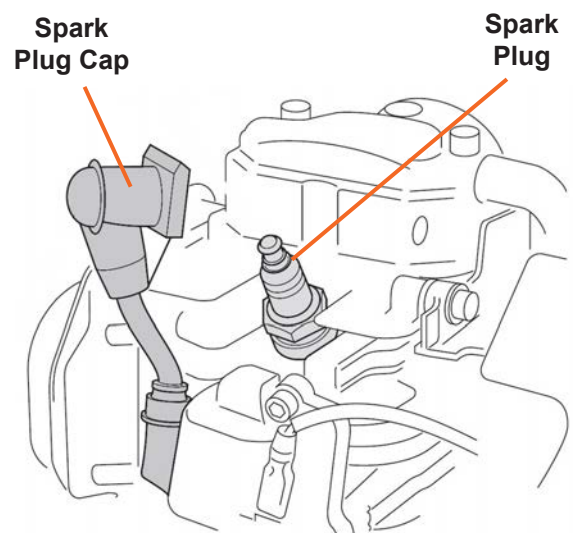


Figure 10

Maintenance

Spark Arrestor Cleaning/Replacement

1. Remove the 5mm hex bolt on top of the engine cover and slide the cover off (see Figure 9).
2. Remove the three 4mm x 6mm self-tapping screws from the spark arrester and remove the spark arrester and the exhaust filter from the muffler (see Figure 11).
3. Pinch the exhaust filter, strike lightly with a finger, and remove carbon deposits. Be careful not to strike strongly. The exhaust filter must be free of breaks and holes. If it is damaged or fouled excessively, replace with a new exhaust filter.
4. Use a brush to remove carbon deposits from the spark arrester screen. Be careful to avoid damaging the screen. The spark arrester must be free of breaks and holes. Replace the spark arrester if it is damaged.
5. Install the exhaust filter and spark arrester in the reverse order of disassembly. When you install the spark arrester, the spark arrester's outlet must point to the side opposite the spark plug.
6. Replace the engine cover, reinstall the hex bolt and tighten securely.

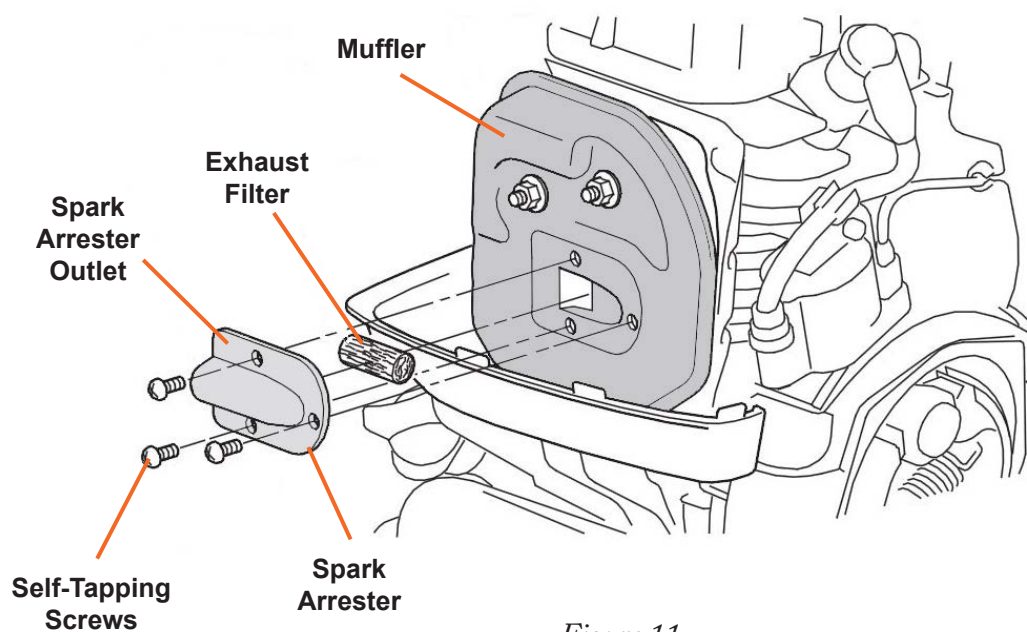


Figure 11

Maintenance

Crankshaft and Piston Lubrication

1. Remove four hex bolts and crankshaft cover (see Figure 12).
2. Inspect the color and amount of grease inside the crankcase.
There should be a ring of grease collected to the wall inside the crankcase. Should the depth of the ring from the wall inward measure 1/4" or less this indicates the grease is low.
3. If the amount of grease is low, add a small amount. The maximum level should not be more than 1/2".

NOTE: Overfilling with grease can damage the power driver.

4. If the grease is discolored, clean out old grease and add new grease level with the bottom edge of the crank pin head.
5. Inspect the o-ring seal and replace it on the crankcase cover.
6. Replace the crankcase cover and tighten the hex bolts.

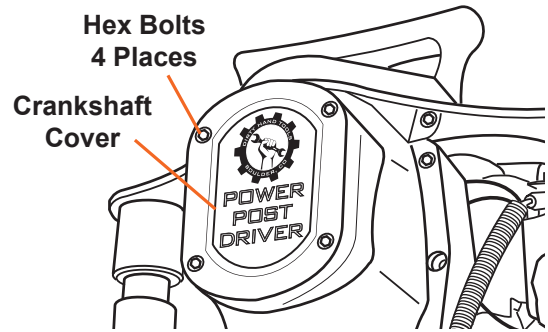


Figure 12

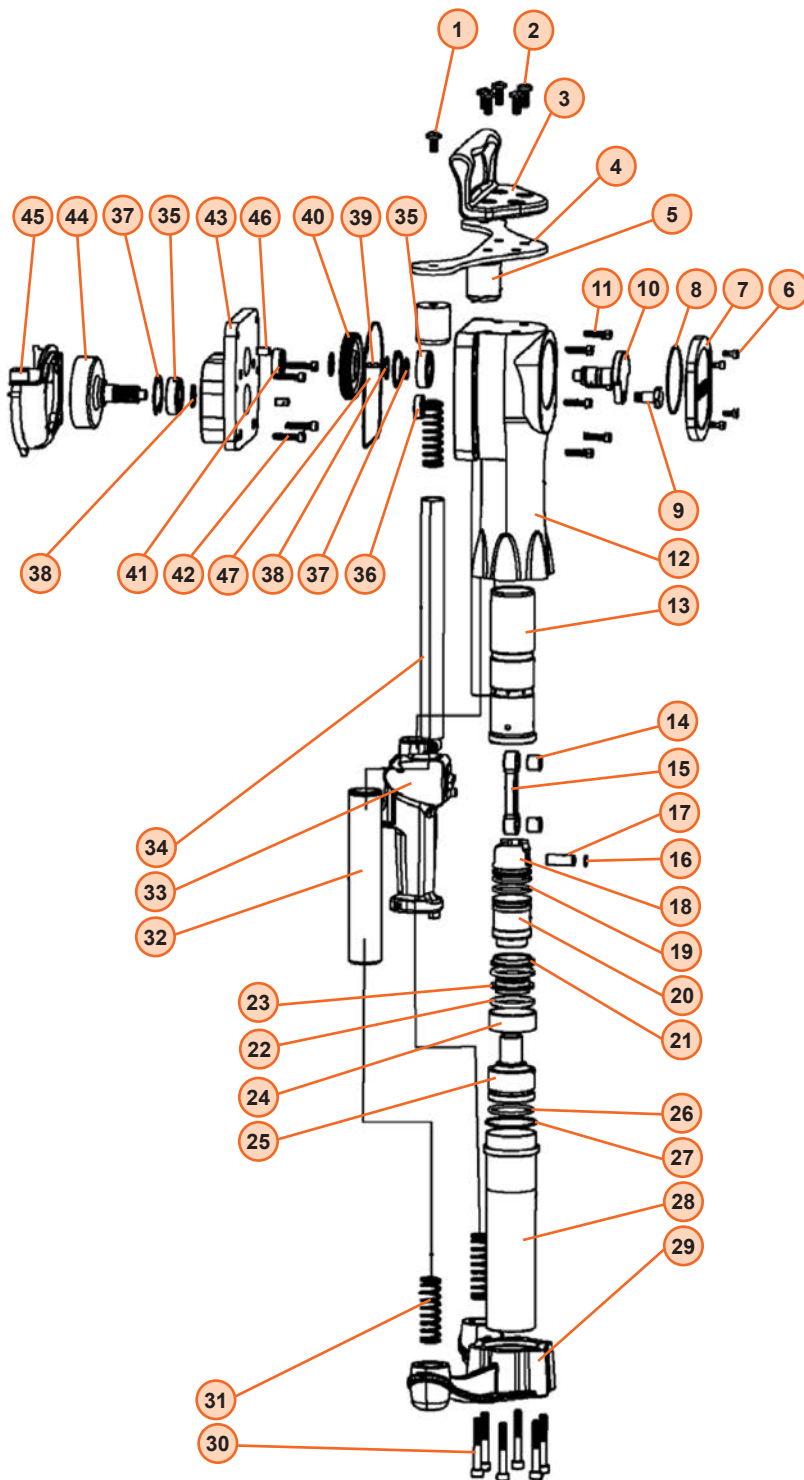


Crankshaft grease should be between 1/4" to 1/2" thick on inside walls and be clear, if dark or discolored it should be replaced.

Troubleshooting

PROBLEM	SOLUTION
Engine will not start	<ul style="list-style-type: none"> • Add gas to gas tank • Connect spark plug wire to spark plug • Move choke upwards to CLOSED position
Engine runs rough, floods during operation	<ul style="list-style-type: none"> • Clean or replace air cleaner
Engine is hard to start	<ul style="list-style-type: none"> • Drain old fuel and replace with fresh • Make sure spark plug cap is securely attached to plug
Engine misses or lacks power	<ul style="list-style-type: none"> • Clean or replace air cleaner • Replace spark plug and adjust gap • Drain, clean and refill gas tank
Engine stops suddenly	<ul style="list-style-type: none"> • Low quality or deteriorated gasoline, drain and replace • Spark plug cap is damaged or loose • Move choke downwards to OPEN position after start
Power Post Driver runs slowly	<ul style="list-style-type: none"> • Engine oil too full, check dipstick and remove some oil
Recoil is difficult to pull	<ul style="list-style-type: none"> • Remove the spark plug and pull the recoil starter cord several times until it pulls freely. Replace spark plug. • Check oil dipstick and remove some oil if necessary.

Parts List



Item #	Part Name Part	Qty
1	Hex Bolts, M8x15	2
2	Top Handle Bolts, M8x20	4
3	Upper Handle	1
4	Fixed Plate	1
5	Handle Cup	2
6	Hex Bolts, M5x15	4
7	Crankcase Cover	1
8	O-Ring Seal 75x1.8	1
9	Crank Pin	1
10	Crankshaft	1
11	Hex Bolts, M6x25	6
12	Post Driver Body	1
13	Cylinder	1
14	Bush Bearing	2
15	Connecting Rod	1
16	12 Retainer	1
17	Wrist Pin 12x32	1
18	Piston	1
19	O-Ring Seal 37.5x3.5	3
20	Hammer	1
21	Anvil O-Ring Retainer	1
22	O-Ring Seal 40x5.3	2
23	Big Retainer	1
24	Anvil O-Ring Cup	1
25	Anvil	1
26	O-Ring Seal 45x3.5	1
27	O-Ring Seal 56x1.8	1
28	Chuck Tube	1
29	Lower Driver Body	1
30	Hex Bolts, M8x60	6
31	Handle Anti-Vibration Spring	4
32	Handle Tube	1
33	Switch	1
34	Handle Tube	2
35	Bearing, 6004-2RS	2
36	Bearing, 6000-2RS	1
37	42 Retainer	2
38	20 Retainer	2
39	Key, 4x4X12	1
40	Gear	1
41	Bearing, 6201-2RS	1
42	Hex Bolts, M6x30	4
43	Clutch Housing	1
44	Clutch Drum	1
45	Cover	1
46	Pin	2
47	Gasket	1

Warranty & Specifications

IMPORTANT NOTICE

We, the manufacturer, reserve the right to change the product and/or specifications in this manual without notification. The manual is for information usage only and the pictures and drawings depicted herein are for reference only.

Warranty Repair and Service

Do not return this product to the store for warranty issues or repair. Call our customer service department at **720-287-5182**, **1-877-487-8275**, or visit www.dirtyhandtools.com for the location of the nearest service center.

Record the information below for future reference.

Model No. _____

Serial No. _____

Date of Purchase _____

Place of Purchase _____

Specifications

SKU/Part No.	103400	104369
Description	Power Post Driver	Power Post Driver
Engine	31cc DHT Engine* EPA Approved	35cc Honda Engine* EPA Approved
Engine Type	4-stroke, single cylinder	4-stroke, single cylinder
Engine Fuel Capacity	20.29 fluid ounces (600mL)	21.76 fluid ounces (643mL)
Engine Oil Capacity**	2.37 fluid ounces (70mL)	3.4 fluid ounces (100mL)
Dimensions	23"L x 13"W x 14" D	23"L x 13"W x 14" D
Weight	34 Lbs. (Shipping Weight 45 Lbs.)	34 Lbs. (Shipping Weight 45 Lbs.)
Warranty	2 Year / 2 Year Limited Warranty	2 Year / 2 Year Limited Warranty

*As rated by engine manufacturer

** Not included, shipped without engine oil

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