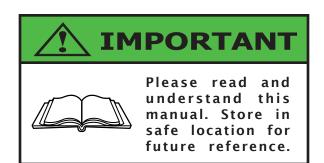


## Gas Engine Pressure Washer with Gear Reduction

DU PMC-349H



Owner's Manual #0783 032010		
Serial Number:	Installation Date:	



Everyone who operates this unit should understand basic operations and safety precautions! The time you take to fully understand the proper installation, maintenance and use of the machine will prolong its service life, and assure you of trouble free operation.

When unpacking, check to make sure all the parts shown on the Parts Breakdown near the end of this manual are included. If any parts are missing or broken, please call Dultmeier Sales as soon as possible.

Consumers should notice that this manual may differ slightly from the actual product as more improvements are made to our products. Some of the pictures in this manual may differ slightly from the actual product as well. Dultmeier Sales reserves the right to update designs and / or change the specifications at any time without incurring any obligation to install them on units previously sold.

If you have any questions or suggestions about this manual, please contact us.

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To avoid serious or fatal personal injury or major property damage, read and follow all safety and operation instructions in the manual.



#### This is a Safety Alert Symbol -

When you see this symbol in the manual, look for the following signal words & be alert to the potential for personal injury or property damage.

**DANGER** 

Warns of potential hazards that WILL cause serious personal injury, death or property damage.

WARNING

Warns of potential hazards that CAN cause serious personal injury, death or property damage.

CAUTION

Warns of potential hazards that WILL or CAN cause minor personal injury, death or property damage.

**↑** IMPORTANT

Indicates special instructions that MUST be followed but not related to hazards.

This manual is intended to assist in the installation and operation of this unit. Do not attempt to operate this unit without reading and understanding this manual.

#### **General Safety**

To avoid the risk of serious bodily injury and property damage, read safety instructions carefully before installing this system. Follow all local and/or national plumbing and electrical codes when installing.



#### Do Not Allow System or Components to Freeze.

To do so may damage the system and will void the warranty.



#### **Never Run the System Dry.**

Running the unit dry (without fluid) can damage internal parts, overheat pump (which can cause burns to people handling or servicing the pump), and will void the warranty.



#### **Hazardous Pressure.**

Do not run the unit with discharge shut off, as hose may burst or damage may occur due to high pressure.





Engines can operate at high temperatures. To avoid burns when servicing pump, allow it to cool for 60 minutes after shutdown before handling.

### Gas Engine Pressure Washer with Gear Reduction Specifications

Style ...... High Pressure Plunger Pump

Capacity ...... 4 GPM

PSI ...... 2200

Maximum Inlet Pressure 60 PSI

Maximum Inlet Temperature ...... 130° F

\*See Included CAT PUMPS® Service Manual for Higher Temperatures

Engine ...... AE GX240K1QA :: 8 HP

Pump...... CC 34G1

Pump Drive ...... Gear Box

Pump Inlet ...... 1/2"

Dimensions Approx. 42"L x 22"W x 23"H

Shipping Weight...... Approx. 110 lbs.

### **System Features & Options**

Heavy Duty Aluminum Baseplate with Wheels

Chemical Injection System

Unloader Valve for Pressure Relief

Safety Pop Off Valve

Thermal Relief Valve

50' High Pressure Gun Hose

Trigger Spray Gun with: Insulated Extension & Gun Swivel

All Units are Pre-Plumbed, Pre-Wired, and Tested

### **Plumbing**

1. Your Pressure Washer is Pre-Plumbed and Garden Hose ready. Simply run your Garden Hose from the Water Supply Outlet to the female Garden Hose fitting on the pump. 3/4" Garden Hose is recommended. (Fig. 1)



**Inlet Water Pressure** should not exceed 60 PSI.



figure 1

### **Set Up & Operation**

- 1. Place unit on a level surface in a manner to permit even oil flow.
- 2. While holding the Trigger Gun open, start the system. All units are tested at production and pressure should come up to specifications. When Trigger Gun is closed Unloader will bypass flow back to the inlet of the pump. The Gauge should read 0 PSI when in bypass mode.



Leaving pump in bypass mode for more than a few minutes can damage pump due to friction heat buildup.

3. The Pressure can be adjusted by turning the handle on the Regulating Unloader Valve. (Fig. 2)



Do not exceed the Pressure Rating of the pump.

- 4. Set your Soap Container next to the Pressure Washer and insert Chemical Suction with Stainer into the container.
- 5. Adjust the Chemical Metering Knob out (counterclockwise) to increase the soap rate or in (clockwise) to decrease the soap rate. Turning the Metering Knob all the way in will turn off the flow of chemical. (Fig. 3)
- 6. Turn high/low nozzle to its ON position. With unit running, squeeze Trigger Wand until soap flows out of nozzle. (Fig. 4)



Hazardous Pressure -Do not discharge toward body.

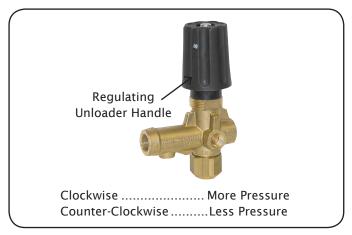


figure 2

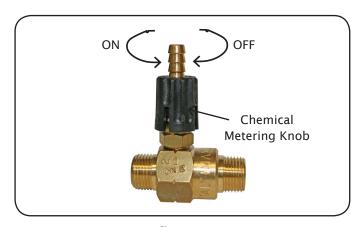


figure 3

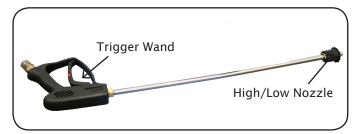


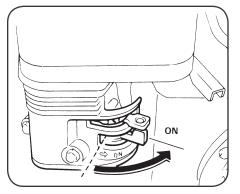
figure 4

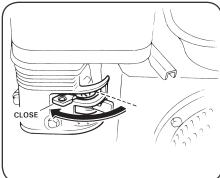
### **Gas Engine**

- 1. Turn the Fuel Valve to the ON position. (Fig. 5)
- 2. Move the Choke Lever to the CLOSE position. (Fig. 6)

**/**N IMPORTANT Do not use Choke if the Engine is warm or the air temperature is high.

3. Move the Throttle Lever slightly to the left. (Fig. 7)





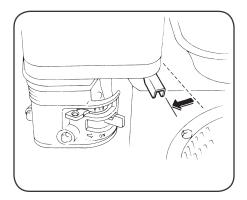


figure 6 figure 7 figure 5

4. Start the Engine.

#### **Recoil Starter:**

- · Turn the Engine switch to the ON position. (Fig. 8)
- · Pull the Starter Grip lightly until resistance is felt, then pull back briskly. (Fig. 9)



Do not allow the Starter Grip to snap back against the Engine. Return it gently to prevent damage to the starter.

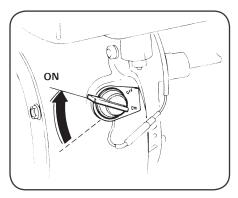
#### **Electric Starter:**

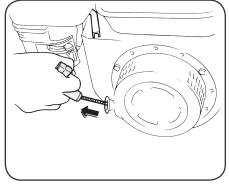
• Turn the Engine switch to the START position and hold it there until the engine starts.



Do not use the Electric Starter for more than 5 seconds at a time. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.

· When the engine starts, allow the engine switch to return to the ON position. (Fig. 10)





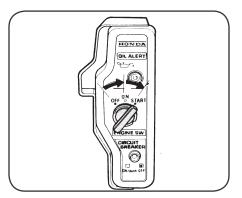


figure 8 figure 9 figure 10

#### **Maintenance - Pump**

1. Change the oil after intial 50 hours. Use CAT PUMPS® Oil, part number CC 6100-1 for 21 oz. bottles or CC 6105-1 for 2.5 gallon jug.



This pump takes 18 oz.

- 2. The oil should be changed every 500 hours. If other than CAT PUMPS® special custom blend multi-viscosity ISO68 hydraulic oil is used, change the oil every 300 hours.
- 3. For extended storage or between use in cold climates, drain all pumped liquids from pump and flush with antifreeze to prevent freezing and damage to the pump. When running antifreeze through system, open and close trigger gun so entire system is protected.

Please refer to the included CAT PUMPS® reference materials for extended pump maintenance.

### Maintenance - Engine

REGULAR SERVICE PERIOD (3) Perform at every indicated month or operating hour interval, whichever comes first.		Each Use	First Month or	Every 3 Months or	Every 6 Months or	Every Year or
ITEM			20 Hrs	50 Hrs	100 Hrs	300 Hrs
Engine Oil	Check Level	х				
	Change		x		x	
Reduction Case Oil (applicable types)	Check Level	х				
	Change		х		х	
Air Cleaner	Check	х				
	Clean			x (1)	x (1)	
	Replace					х
Sediment Cup	Clean				х	
Spark Plug	Check-Adjust				х	
	Replace					х
Spark Arrester (applicable types)	Clean				х	
Idle Speed	Check-Adjust					x (2)
Valve Clearance	Check-Adjust					x (2)
Combustion Chamber	Clean	After every 500 Hours (2)				
Fuel Tank & Filter	Clean				x (2)	
Fuel Tube	Check	Every 2 Years (Replace if necessary) (2)				

- (1) Service more frequently when used in dusty areas.
- (2) These items should be serviced by your Honda servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda Shop Manual for service procedures.
- (3) For commercial use, log hours of operation to determine proper maintenance intervals.

Please refer to the included Honda Engine Owner's Manual for further information and instructions.

### Maintenance - Regulating Unloader Valve

1. Regulating Unloader Valve should be serviced or replaced when leaks occur or if not functioning properly.

### Storage - Engine Care

Proper storage preparation is essential for keeping your system trouble-free and looking good. The following steps will help to keep rust and corrosion from impairing your system's function and appearance, and will make the system easier to start when you use it again.

If the engine has been running, allow it to cool for at least half an hour before cleaning. Clean all exterior surfaces, touch up any damaged paint, and coat other areas that may rust with a light film of oil.

Using a garden hose or pressure washing equipment can force water into the air cleaner or muffler opening. Water in the air cleaner will soak the air filter, and water that passes through the air filter or muffler can enter the cylinder, causing damage.

Gasoline will oxidize and deteriorate in storage. Deteriorated gasoline will cause hard starting, and it leaves gum deposits that clog the fuel system. If the gasoline in your engine deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced.

The length of time that gasoline can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as gasoline blend, your storage temperatures, and whether the tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Fuel deterioration problems may occur with a few months, or even less if the gasoline was not fresh when you filled the fuel tank.

You can extended fuel storage life by adding gasoline stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining the fuel tank and carburetor.

When adding a gasoline stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage. If you keep a container of gasoline for refueling be sure that it contains only fresh gasoline.

- 1. Add gasoline stabilizer following the manufacturer's instructions.
- 2. After adding gasoline stabilizer, run the engine outdoors for 10 minutes to be sure that treated gasoline has replaced the untreated gasoline in the carburetor.
- 3. Stop the engine.

If your engine will be stored with gasoline in the fuel tank and carburetor, it is important to reduce the hazard of gasoline vapor ignition. Select a well ventilated storage area away from any appliance that operates with a flame, such as a furnace, water heater, or clothes dryer. Also avoid any area with a spark-producing electric motor, or where power tools are operated.

If possible, avoid storage areas with high humidity, because that promotes rust and corrosion.

Keep the engine level in storage. Tilting can cause fuel or oil leakage.

With the engine and exhaust system cool, cover the engine to keep out dust. A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A nonporous cover will trap moisture around the engine, promoting rust and corrosion.

If equipped with a battery for electric starter types, recharge the battery once a month while the engine is in storage. This will help extend the service life of the battery.

# Parts Breakdown: DU PMC-849H



ltem	Part Number	Description
1	DU 1796	Aluminum Baseplate with Wheels
2	DU 1252	Hose Holder
3	AE GX240K1QA	8 HP Honda Engine
4	CC 34G1	Cat Plunger Pump with Gear Box
5	IP Y221	Chemical Injector
6	TF 1	Vinyl Tubing, 1/4"
7	NP ST261	Suttner Regulating Unloader Valve
8	GU 22531A	Safety Pop Off Valve
9	NP ST300	Swivel, 3/8" Brass
10	NP ST1500	Spray Wand
11	GU 21718	Stainless Steel Wand Extension, 36"
12	SS 1/4MEG25055	Washjet Nozzle
13	IP ST55N	Adustable Soap Nozzle
14	GA 6HR50	Black Wash Hose, 3/8" x 50'



### Notice Regarding Manufacturer's Limited Warranty

Dultmeier Sales Limited Liability Company (hereinafter Dultmeier), notifies you that component part(s) carry a manufacturer's limited warranty provided by the manufacturer of said component part(s). These warranties do not pertain to normal wear of component part(s) that may occur within any specified period. While Dultmeier is not the manufacturer of any of the component part(s), Dultmeier will assist you in processing any and all manufacturer's warranty claim if applicable and available. Any and all manufacturer's claims must be submitted in writing to the manufacturer within the warranty periods provided by the manufacturer.

Defective component part(s) that are to be considered for manufacturer's limited warranty must be returned to the manufacturer by prepaid shipment with the applicable manufacturer's limited warranty period. If the component part(s) are deemed to be defective under the manufacturer's warranty, Dultmeier will assist in obtaining a replacement or repair of the component part(s). Said component part(s) will be returned F.O.B. Omaha, Nebraska. Replacement or repair shall be the exclusive remedy for any breach of warranty. Labor for installation, either with respect to original or replacement part or components, is not covered under the manufacturer's limited warranty.

Neither the manufacturer nor Dultmeier warrants loss of income or consequential damages for injury or commercial loss resulting from any breach of warranty or warranties stated above.

The manufacturer's limited warranty as stated does not apply to component part(s) which have been improperly installed, misused, altered, neglected, abused or not installed, adjusted, maintained, or used in accordance with applicable codes and ordinances and in accordance with the manufacturer's specifications as to such factors.

Notwithstanding Dultmeier's willingness to assist in the processing of the manufacturer's limited warranty, Dultmeier makes no warranty against infringement of the like, makes no warranty of merchantability, makes no warranty of fitness for a particular purpose, and makes no other warranty, express or implied, including implied warranty arising from the course of dealing or usage of trade.

Compliance with all local, state and federal codes regarding the installation and operation of said equipment, parts and components shall be the responsibility of the purchaser. The rights and obligations of the parties shall be governed by the laws of the State of Nebraska.

Dultmeier Sales • 1-800-228-9666 Omaha, NE • 1-800-553-6975 Davenport, IA

Production Checklist	
OK NA Pump Oil Level OK NA Gear Box Oil Level OK NA Clamps Tight OK NA Bolts Tight & Anti-Seized OK NA Fittings Straight OK NA Tested OK NA Winterized OK NA Gas Removed from Tank & Bowl OK NA OK NA	OK MA Pop-Off Valve Set PSI OK MA Unloader Valve Locked OK MA PSI OK MA Engine RPM Accessories OK MA Safety Pop Off Valve OK MA Trigger Gun 1 2 OK MA High Pressure Hose OK MA Gauge OK MA Gouge OK MA OK MA
Built By	Checked By
Customer Checklist	
OK NA Oil Level To Manufacturer's Specifications OK NA Accessories Included OK NA Shipping Container Was In Good Shape OK NA Overall Condition	

If you have any questions or concerns about condition of this unit, please contact us before operating.