

HYDRAULIC POWER GRAVELER

Instruction and Safety Information



88 Signet Drive
Weston, ON M9L 1T3
Tel: (416) 744-2050
Fax: (416) 744-4247

- Pickering, ON
- Toronto (Bloor St.), ON
- Toronto (Wade Ave.), ON
- Weston (Weston Rd.), ON
- Weston (Signet Dr.), ON
- Barrie, ON
- Oakville, ON
- Hamilton, ON
- London, ON
- Edmonton, AB
- Calgary, AB
- Winnipeg, MB
- Bensenville (Chicago), IL

OPERATOR TRAINING

1. Before being allowed to use this or any piece of equipment, the operator should first fully understand all proper operating procedures. Special attention should be paid to the control locations and functions, all warning messages, and possible hazardous operations conditions.
2. Proper training includes informing the operator as to the correct protective clothing and safety equipment that should be worn while operating the equipment. Clothes that fit properly (that is, not too tight and not too loose) includes a long sleeve shirt buttoned at the cuff, long cuffless pants, steel toe safety shoes and safety glasses or full face shield. These items should be mandatory apparel for the operator. If work is being done at a level lower than the level at which the sweeper is being used, a hard hat must be worn.
3. Before using the machine on a roof, the operator should become familiar with the controls, safety features, and the overall 'feel' of the machine; on the ground, preferably in an open area with no vehicular or pedestrian traffic.

INTENDED USE

This machine is intended to be used for the sole purpose of moving gravel, roofing material, trash and 55 gallons insulated tank on the flat roof. It is not designed for moving people.

BEFORE STARTING

 **Warning** Make certain that all the safety covers are in place and all bolts and nuts are tightened securely. Never under any circumstances operate the machine without all safety covers bolted firmly in place.

Never put hands, feet or any parts of body close to the rotating parts when engine is running.

Never leave the machine unattended when the engine is running.

Note: Make certain that the engine crankcase is filled with oil and that the engine has been serviced as per the engine instruction.

 **WARNING**

Misuse of this equipment may result in damage or injury. It is the responsibility of the purchaser to ensure that the personnel operating the machine are trained in the proper operating procedures and all safety regulations.

The employer shall permit only these employees qualified by training or experience to operate equipment and machinery.

The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to the work environment, to control or eliminate any hazards or other exposure to illness or injury.

Regulations governing the use, selection, and maintenance of personal protective and lifesaving equipment as stated in safety regulations shall be followed.

Do not operate on a roof without a perimeter warning system or barrier.

SAFETY PRECAUTIONS

1. When using this equipment, safety shoes, full-face shield and proper clothing should be worn to protect the operator from flying debris.
2. Do not operate this equipment within 10 feet of the roof edge.
3. When on-deck equipment is being used, perimeter warning lines must be set up 10 feet from the roof edge, and around all roof openings.
4. Follow local code requirements.
5. Never leave the machine unattended when the engine is running.
6. Shut off the engine before refueling, checking, adjusting or repairing.
7. Always keep your hands and feet clear of moving parts.
8. Do not operate unless all safety covers and guards are in position.

OPERATOR TRAINING

1. Before being allowed to use this or any piece of equipment, the operator should first fully understand all proper operating procedures. Special attention should be paid to the control locations and functions, all warning messages, and possible hazardous operations conditions.
2. Proper training includes informing the operator as to the correct protective clothing and safety equipment that should be worn while operating the equipment. Clothes that fit properly (that is, not too tight and not too loose) include a long sleeve shirt buttoned at the cuff, long cuffless pants, steel toe safety shoes and safety glasses or full-face shield. These items should be mandatory apparel for the operator. If work is being done at a level lower than the level at which the sweeper is being used, a hard hat must be worn.
3. Before using the machine on a roof, the operator should become familiar with the controls, safety features, and the overall 'feel' of the machine, on the ground, preferably in an open area with no vehicular or pedestrian traffic.

INTENDED USE

This machine is intended to be used for the sole purpose of moving a Gravel bucket, Dumper Tray and 55 Gallons insulated tank on a flat roof. It is not designed for moving people.

BEFORE STARTING



Warning Make certain that all the safety covers are in place and all bolts and nuts are tightened securely. Never under any circumstances operate the machine without all the safety covers bolted firmly in place.

Never put hands, feet or any parts of body close to the rotating parts when engine is running.

Never leave the machine unattended when the engine is running.

Note: Make certain that the engine crankcase is filled with oil and that the engine has been serviced as per the engine instructions.

Make sure that the hydraulic tank has enough fluid.

THROTTLE
CONTROL LEVER

PARKING BRAKE

DIRECTION CONTROL
HANDLE



OPERATION WITH POWER

Note: The Hydraulic power graveler can move forward and reverse with power and without power.

Start the engine as per the engine operation instruction. When engine running smoothly, turn the throttle lever to a higher engine speed.

Release the Parking brake.

To move forward:

Pull the F side of the Direction control handle fully towards the operator. The brake will release automatically and the power graveler will start moving forward.

To turn while power graveler is moving:

Pull on the handrail to the direction of turn and push with the other hand on the other side of handrail while pulling the Directional control handle.

To stop the Hydraulic power graveler:

Release the direction control handle. the brake will engage and stop the power graveler.

To move reverse:

Pull the R side of the Direction control handle fully towards the operator and the power graveler will start to move reverse.

To change the speed:

Turn the throttle lever clockwise to increase the speed.

Turn the throttle lever counterclockwise to decrease the speed.

OPERATION WITHOUT POWER

Note: This operation can be performed without the engine turned on.

Release the Parking brake.

Moving forward:

Pull the F side of the Direction control handle fully towards the operator. The brake will release, push and steer as desired.

Moving reverse:

Pull the R side of the Direction control handle fully towards the operator. The brake will release, push and steer as desired.

Engage the Parking brake while not in operation.

MAINTENANCE

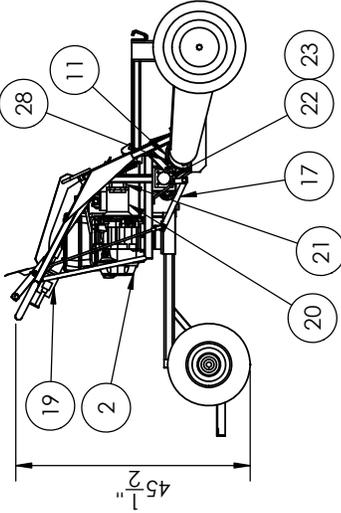
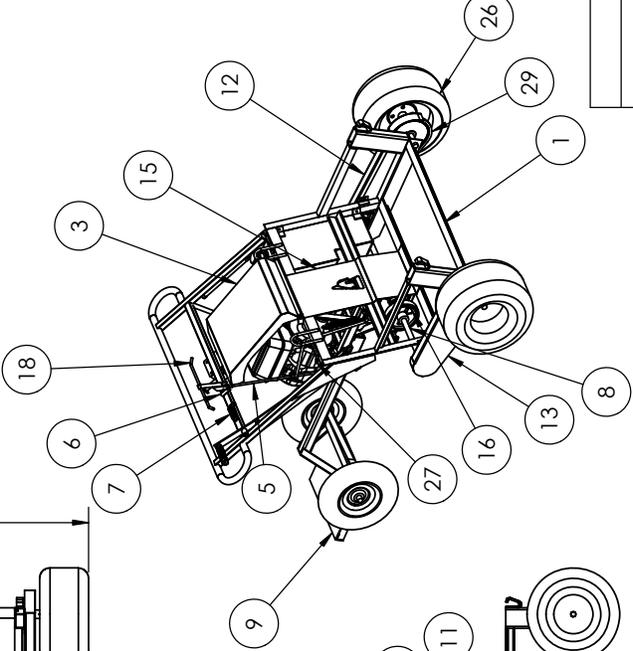
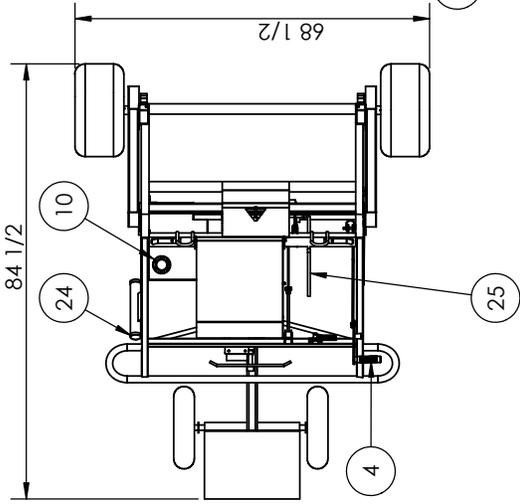
Clean and grease the chain when needed. Grease all bearings with grease every 3 months.

For engine maintenance, carefully follow the engine maintenance instructions that are provided with this machine.

Note: Remove spark plug wire from spark plug to avoid engine start-up accidentally before servicing the Hydraulic power graveler or the engine.

4 3 2 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	73	MAIN FRAME	1
2	HONDA GX270	ENGINE	1
3	HPG-22A	ENGINE TOP COVER	1
4	HPG-50A	HY GRAVEL BUCKET HANDLE	1
5	HPG-64A	PARKING BRAKE EXTENSION	1
6	HPG-70A	PARKING BRAKE LEVER	1
7	HPG-71A	THROTTLE LEVER	1
8	HPG-72A	DIFF. AXLE SUB ASSY	1
9	HPG-73A	CART ASSEMBLY	1
10	HPG-74A	HYDRAULIC FLUID TANK ASSY	1
11	HPG-75A	BRAKE LINE SUB ASSY	1
12	HPG-150	CHAIN COVER - LEFT	1
13	HPG-153	CHAIN COVER-RIGHT	1
14	HPG-164	SQUIRE NUT	1
15	HPG-165	PUMP COVER	1
16	HPG-166	BRAKE DRUM	1
17	HPG-167	BRAKE LINK SUB ASSY	1
18	HPG-168	DIRECTION CONTROL HANDLE	1
19	HPG-169	HYDRAULIC CONTROL VALVE	1
20	HPG-170	REDUCTION GEAR BOX	1
21	HPG-171	HYDRAULIC PUMP	1
22	HPG-172	HYDRAULIC MOTOR	1
23	HPG-173	SPROCKET 12T	1
24	HPG-174	ROUND CAPS	2
25	PG-36B	REAR LOCK SUB ASSY	1
26	PG-136A	WHEEL ASSEMBLY	2
27	PG-161	GRAVEL BUCKET LOCK BAR	2
28	RS 40_1	SPROCKET CHAIN_1	1
29	RS 40_2	SPROCKET CHAIN-2	2



A B

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN		
TOLERANCES:	CHECKED		
FRACTIONAL: ±	ENG APPR.		
ANGULAR: MACH ±	MFG APPR.		
TWO PLACE DECIMAL ±	Q.A.		
THREE PLACE DECIMAL ±	COMMENTS:		
INTERPRET GEOMETRIC TOLERANCING PER:			
MATERIAL:			
FINISH:			
USED ON:			
NEXT ASSY:			
APPLICATION:			
DO NOT SCALE DRAWING			

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SPAR-MARATHON ROOFING SUPPLIES	
TITLE: HYDRAULIC POWER GRAVELER	
SIZE DWG. NO.	REV
B	HPG-000
SCALE: 1:24	WEIGHT: SHEET 1 OF 1

4 3 2 1