



OPERATOR'S & PARTS MANUAL

MODEL HPU 13 HARLEY POWER UNIT



PALADIN
LIGHT CONSTRUCTION GROUP



The Power of Combined Excellence



SERIAL NUMBER: _____

MODEL NUMBER: _____

SERIAL NUMBER: HPU139B001 AND UP

Manual Part # 51-4187
December 2009

NOTES

PREFACE

This manual describes the installation, operation, and maintenance of the Harley Power Unit. Read and understand the manual in its entirety before performing installation, operation or maintenance in order to ensure the equipment's optimum level of performance. Read and follow all safety and precautionary notes included in this text.

Throughout this manual, references are made to front, back, right and left directions. These are determined by standing at the operator's controls of the power unit.

REMINDER: Fill in the warranty card and mail within 10 days of your purchase date. While filling in the card with the correct information, put the date purchased and the serial number on the front cover of this manual. Should you need to call your dealer or Harley Attachments, this information will help them to more quickly provide accurate service for you.

Any questions related to this should be directed to Harley Attachments customer service at **800-456-7100**.

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OWNER ASSISTANCE

Harley Attachments, LLC and your authorized Harley dealer want you to be completely satisfied with your investment. To resolve any problems that may occur, please contact the Service Manager of your local Harley dealer. If your problem has not been handled to your satisfaction, contact:

Customer Service (8:00am – 5:00pm EST)
Harley Attachments, LLC
2800 North Zeeb Road
Dexter, MI 48130-9499
734-996-9116
800-456-7100

Please be prepared to provide the following information:

- Your name, address, and telephone number
- Machine model and SERIAL NUMBER
- Dealership name and address
- Machine purchase date
- Nature of problem

Local Dealer Information:

Contact: _____
Address: _____
Phone #1: _____
Phone #2: _____
Email: _____

SPECIFICATIONS

Engine Make and Model.....	Honda GX390
Horse Power	11
Tire Size.....	18 X 8.5 X 10
Tire Pressure	28 psi
Travel Speed Forward (max).....	0 - 4.5 mph
Travel Speed Reverse (max).....	0 - 3.0 mph
Auxillary Hydraulic Flow (max)	6 gpm
Auxillary Hydraulic Pressure (max)	2500 psi
Reservoir Capacity	6.0 Gallons
Weight (with hydraulic oil).....	366 lbs
Fuel Tank Capacity	1.72 Gallons

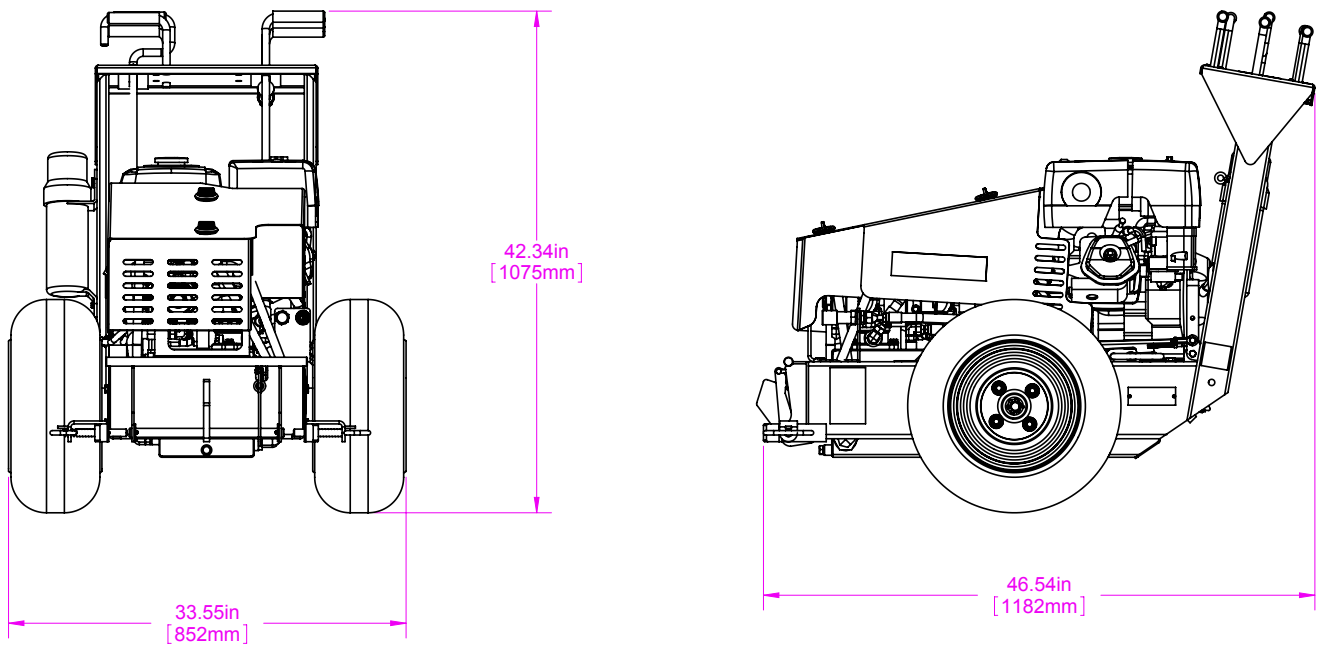


Figure 1. Specifications

BOLT TORQUE CHART

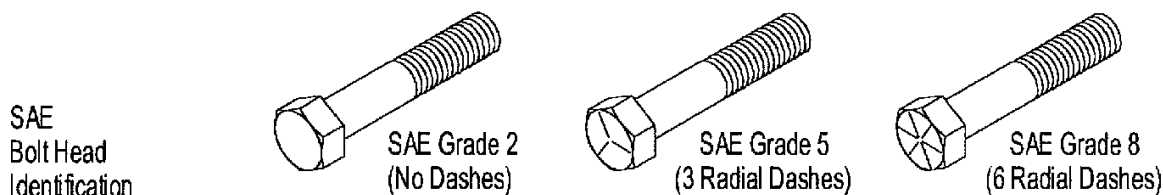
After every ten (10) hours of operation, check all hardware and tighten where required.

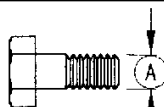
SAE Series Torque Chart

DO NOT use these values if a different torque value or tightening procedure is listed for a specific application. Torque values listed are for general use only.

Fasteners should be replaced with the same grade.

Make sure fastener threads are clean and you properly start thread engagement. This will prevent them from failing when tightening.

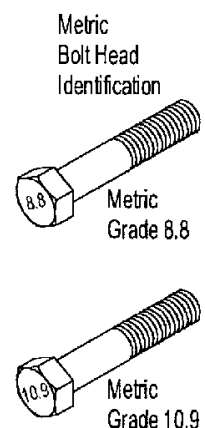


Bolt Diameter "A"	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		Lbs.-Ft	(N-m)	Lbs.-Ft	(N-m)	Lbs.-Ft	(N-m)
1/4	7/16	6	(8)	11	(15)	14	(19)
5/16	1/2	13	(18)	21	(28)	25	(34)
3/8	9/16	23	(31)	38	(52)	55	(75)
7/16	5/8	37	(50)	55	(75)	80	(110)
1/2	3/4	57	(77)	85	(115)	120	(165)
9/16	13/16	82	(111)	125	(170)	180	(245)
5/8	15/16	111	(150)	175	(240)	230	(310)
3/4	1 1/8	200	(270)	300	(410)	440	(600)
7/8	15/16	280	(380)	450	(610)	720	(975)
1"	1 1/2	350	(475)	680	(925)	1035	(1400)
1 1/8	1 11/16	450	(610)	885	(1200)	Bolt Diameter 	
1 1/4	1 7/8	600	(815)	1255	(1700)		
1 3/8	2 1/16	675	(915)	1620	(2200)		
1 1/2	2 1/4	920	(1250)	2200	(2900)		

Metric Series Torque Chart

Use only metric tools on metric hardware. Other tools may not fit properly. They may slip and cause injury.

Bolt Diameter "A"	Wrench Size	MARKING ON HEAD			
		8.8		10.9	
		N-m	(Lbs.-Ft)	N-m	(Lbs.-Ft)
5 mm	8 mm	6	(4.5)	9	(6.5)
6 mm	10 mm	10	(7.5)	15	(11)
8 mm	13 mm	25	(18)	35	(26)
10 mm	16 mm	50	(37)	75	(55)
12 mm	18 mm	85	(63)	130	(97)
14 mm	21 mm	110	(80)	150	(110)
16 mm	24 mm	215	(159)	315	(232)
20 mm	30 mm	435	(321)	620	(457)
24 mm	36 mm	750	(553)	1070	(789)
30 mm	46 mm	1495	(1103)	2130	(1571)



SAFETY STATEMENTS



This statement is used where serious injury or death will result if the instructions are not followed properly.



This statement is used where serious injury or death could result if the instructions are not followed properly.



This statement is used where minor injury could result if the instructions are not followed properly.



This statement is used where equipment or property damage could result if the instructions are not followed properly.



This symbol by itself or used with a safety signal word throughout this manual is used to call your attention to instructions involving your personal safety or the safety of others. Failure to follow these instructions can result in injury or death.

GENERAL SAFETY PRECAUTIONS



READ MANUAL PRIOR TO INSTALL

Improper installation, operation, or maintenance of this equipment could result in serious injury or death. Operators and maintenance personnel should read this manual as well as all manuals related to this equipment and the prime mover thoroughly before beginning installation, operation, or maintenance. **FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL.**



READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.



KNOW YOUR EQUIPMENT

Know your equipment's capabilities, dimensions, and operations before operating. Visually inspect your equipment before you start and never operate equipment that is not in proper working order with all safety devices intact. Check all hardware to assure it is tight. Make certain that all locking pins, latches, and connection devices are properly installed and secured. Remove and replace any damaged, fatigued, or excessively worn parts. Make certain all safety decals are in place and are legible. Keep decals clean and replace them if they become worn and hard to read.

WARNING

PROTECT AGAINST FLYING DEBRIS

Always wear proper safety glasses, goggles, or a face shield when driving pins in or out or when any operation causes dust, flying debris, or any other hazardous material.

WARNING

LOWER OR SUPPORT RAISED EQUIPMENT

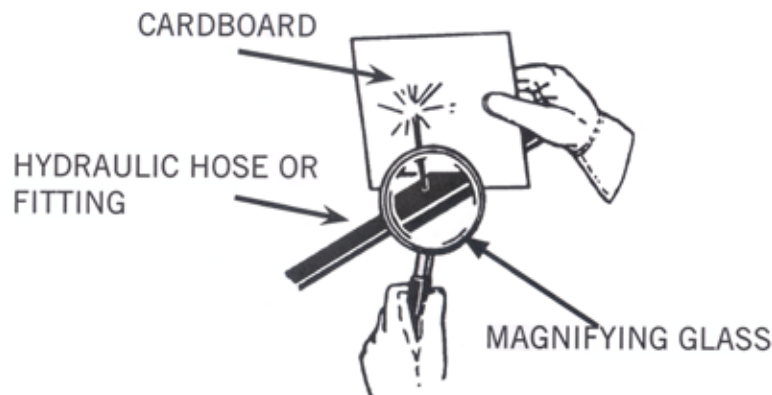
Do not work under raised booms without supporting them. Do not use support material made of concrete blocks, logs, buckets, barrels, or any other material that could suddenly collapse or shift positions. Make sure support material is solid, not decayed, warped, twisted, or tapered. Lower booms to ground level or onto blocks. Lower booms and attachments to the ground before leaving the cab or operator's station.

WARNING

USE CARE WITH HYDRAULIC FLUID PRESSURE

Hydraulic fluid pressure can penetrate the skin and cause serious injury or death. Hydraulic leaks under pressure may not be visible. Before connecting or disconnecting hydraulic hoses, read your prime movers operator's manual for detailed instructions on connecting and disconnecting hydraulic hoses or fittings.

- Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.
- If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research immediately to determine proper treatment.
- Wear safety glasses, protective clothing, and use a sound piece of card board or wood when searching for hydraulic leaks. **DO NOT USE YOUR HANDS! SEE ILLUSTRATION BELOW.**



WARNING

DO NOT MODIFY MACHINE OR ATTACHMENTS

Modifications may weaken the integrity of the attachment and may impair the function, safety, life, and performance of the attachment. When making repairs, use only the manufacturer's genuine parts, following authorized instructions. Other parts may be substandard in fit and quality. Never modify any ROPS (Roll Over Protection System) equipment or device. Any modifications must be authorized in writing by the manufacturer.

WARNING**SAFELY OPERATE EQUIPMENT**

Do not operate equipment until you are completely trained by a qualified operator in how to use the controls, know its capabilities, dimensions, and all safety requirements. See your prime movers manual for these instructions.

- Keep all step plates, grab bars, pedals, and controls free of dirt, grease, debris, and oil.
- Never allow anyone to be around the equipment when it is operating or being serviced.
- Do not allow riders on the attachment or the prime mover.
- Do not operate the equipment from anywhere other than the correct operators position.
- Never leave equipment unattended with the engine running or with this attachment in a raised position.
- Do not alter or remove any safety feature from the prime mover or this attachment.
- Know your work site safety rules as well as traffic rules and flow. When in doubt on any safety issue, contact your supervisor or safety coordinator for an explanation.

WARNING**SAFELY MAINTAIN AND REPAIR EQUIPMENT**

- Do not wear loose clothing or any accessories that can catch in moving parts. If you have long hair, cover or secure it so that it does not become entangled in the equipment.
- Work on a level surface in a well lit area.
- Use properly grounded electrical outlets and tools.
- Use the correct tool for the job at hand. Make sure they are in good condition for the task required.
- Wear the protective equipment specified by the tool manufacturer.

EQUIPMENT SAFETY PRECAUTIONS

NOTICE

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator. In addition, to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment. The designed and tested safety of this equipment depends on it being operated within the limitations as explained in this manual.

NOTICE**INITIAL SET-UP AND SYSTEMS CHECK**

- Air in hydraulic systems can cause erratic operation and allows loads or equipment components to drop unexpectedly.

 **WARNING**

- Before operating equipment purge any air in the system by engaging all hydraulic functions.
- Check that all control lever positions function as instructed in the Operator's Manual. Do not operate until control lever and equipment movements are correct.
- Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit. Check and route hoses carefully to prevent damage.
- Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts.
- Operate moveable components through full operational range to check clearances. Replace damaged hoses immediately.
- Ensure implement is properly attached, adjusted, and in good condition. Power unit coupler lock-pins must be fully extended and properly engaged into attachment retaining holes.

 **WARNING**

SAFELY OPERATE EQUIPMENT

Improper operation can cause the machine to tip or roll over and cause injury or death.

- Turn on level ground.
- Go up and down slopes, not across them.
- Keep the heavy end of the machine uphill. Only engage power when equipment is at ground level. Always disengage power when equipment is raised off the ground.
- Do not disconnect hydraulic lines until all system pressure is relieved.
- Never go underneath equipment lowered to the ground or raised.
- Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.
- Never direct discharge toward people, animals, or property.
- Do not operate equipment while under the influence of alcohol or drugs.
- Operate only in the daylight or good artificial.
- Always comply with all state and local lighting and marking requirements.
- Ensure equipment is properly attached, adjusted, and in good operating condition. Power Unit coupler lock-pins must be fully extended and properly engaged into attachment retaining slots.



WATCH FOR OPERATING HAZARDS

- Look down and to the rear and make sure area is clear before operating in reverse.
- Watch for hidden hazards on the terrain during operation.
- Use extreme care when working close to fences, ditches, other obstructions, or on hillsides.
- Reduce ground speed on slopes and rough terrain.
- Do not operate on steep slopes.
- Do not stop, start, or change directions suddenly on slopes.
- Stop Power unit and implement immediately upon striking an obstruction. Turn off engine. Inspect and repair any damage before resuming operation.



MAINTENANCE SAFETY

- Your dealer can supply original equipment hydraulic accessories and repair parts. Substitute parts may not meet original equipment specifications and may be dangerous.
- Avoid electrical system hazards. Never work on the electrical system unless you are qualified and thoroughly familiar with system details and the special handling requirements.
Disconnect battery before working on electrical system. Remove "ground" cable first. When reconnecting battery, connect "ground" cable last.
- Never perform service or maintenance with engine running.
- Tighten all bolts, nuts, and screws, and check that all cotter pins are installed securely to ensure equipment is in a safe condition before operating.



EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA DUST ALONG WITH OTHER HAZARDOUS DUSTS MAY CAUSE SERIOUS OR FATAL RESPIRATORY DISEASE.

It is recommended to use dust suppression, dust collection and if necessary personal protective equipment during the operation of any attachment that may cause high levels of dust.

SAFETY DECAL AND SERIAL TAG PLACEMENT

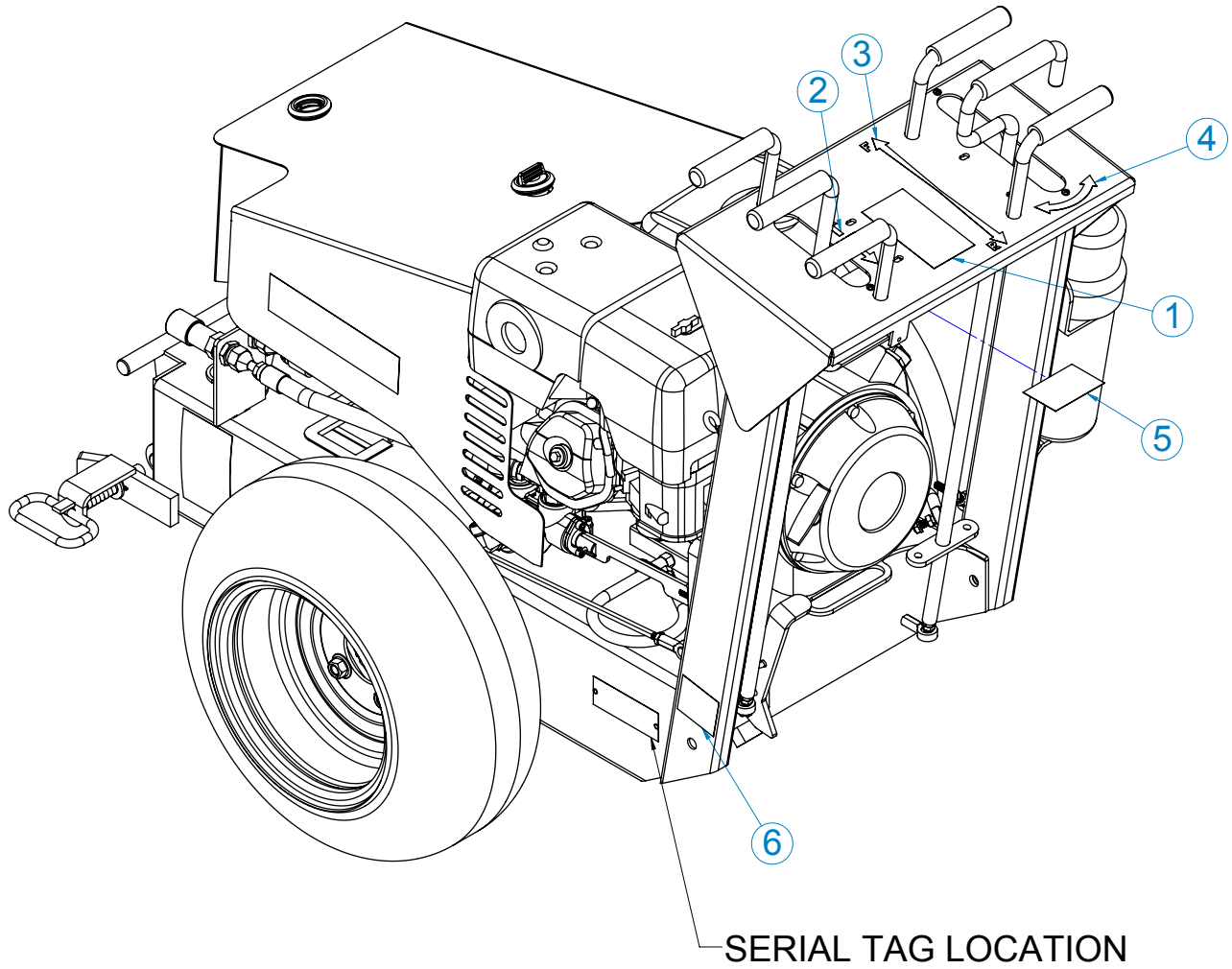
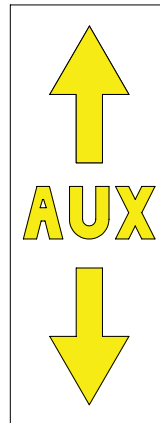


Figure 2. Safety Decals

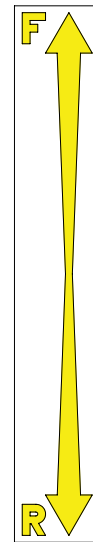
SAFETY DECALS



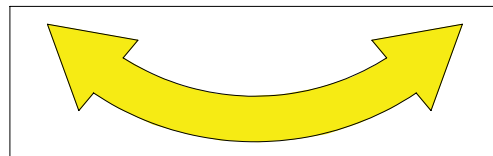
#1 - PN: P979104



#2 - PN: P979100



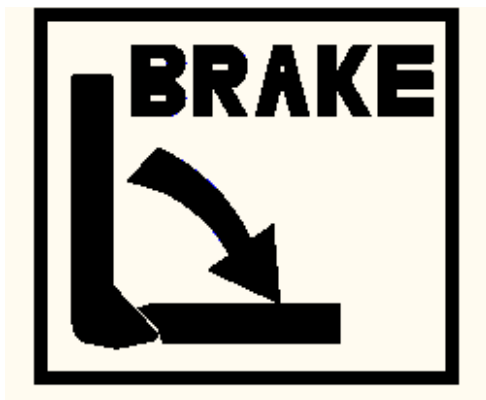
#3 - PN: P979102



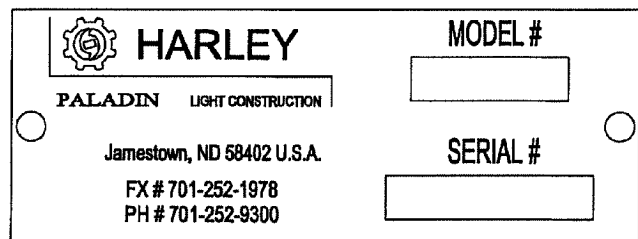
#4 - PN: P979101



#5 - PN: P979105



#6 - PN: P979103



SERIAL # TAG

OPERATIONAL PROCEDURE



The Power Unit is a demanding machine. Only fully trained operators or trainee operators under supervision of a fully trained person should use this machine.

BEFORE OPERATING THE POWER UNIT

- Learn the power unit controls and how it interacts with the attachment mounted to it.
- Read and understand the Operators Manual for the attachment being used.
- Read and understand the Operators Manual for the Honda engine.
- Be sure you are in a safe area, away from traffic or other hazards.
- Check all hardware, making sure it is tight.
- Replace any damaged or fatigued hardware with properly rated fasteners.
- Check the tire pressure on the Power Unit and the attachment before using.
- Be sure all persons not operating the Power Unit are clear of the area being worked on.
- Always wear proper apparel such as a long sleeved shirt, with buttoned cuffs; safety glasses, goggles or a face shield, ear protection and a dust mask.

WHILE OPERATING THE POWER UNIT

- Keep hands, feet, hair and other loose clothing away from all moving parts.
- Before leaving the operators position for any reason, STOP the engine and set the brake.



Never operate the Power Unit or any attachment without all shields and safety equipment in place.

- While crossing rough terrain, reduce speed to avoid loss of control.
- While you operate the Power Unit and attachment in an open area, check for proper operation of all controls and all protective devices. Note and report any repairs needed.

BEFORE EACH USE

- Perform daily maintenance as indicated in Maintenance Schedule.
- Run engine at low idle and check for proper control operation.

CONNECTING ATTACHMENT TO POWER UNIT

- Be sure attachment to be connected is positioned to receive Power Unit.
- Pull attachment lock handles on Power Unit and rotate 90° to maintain extended position.
- Start engine, release brake and carefully drive the Power Unit forward, engaging the attachment carrier rod with the hooks on the attachment. With attachment engaged, rotate the attachment lock handle 90° and check that the pins are fully engaged.
- Connect the hydraulic lines to the Power Unit auxiliary couplers.

OPERATIONAL PROCEDURE

REMOVING ATTACHMENT FROM POWER UNIT

- Select a hard, level surface to place the attachment on.
- Once in location turn off engine and set brake.
- Secure attachment as described in attachment operators manual.
- Cycle the auxillary hydraulic lever to relieve any pressure.
- Disconnect the hydraulic hoses from the power unit couplers.
- Pull each attachment lock pin out and rotate 90°.
- Start engine, release brake and back out of coupler until it is disengaged from attachment.

STORAGE

- Make sure Power Unit is stored on a hard level surface. Block up control end of unit to keep frame and reservoir up off the ground.
- Turn off gas supply.
- Refer to Honda Engine Operators Manual for storage recommendations.

TRANSPORTING

- Use care when driving up or down ramps to load or unload. Make sure ramp is not too steep so as not to bottom out frame.
- Position unit and turn off engine, set brake and turn off fuel supply valve. (See engine control system)
- Position tie down strap over attachment mount area and one strap around each control panel upright. (Use caution not to strap over any of the control or brake linkage.)

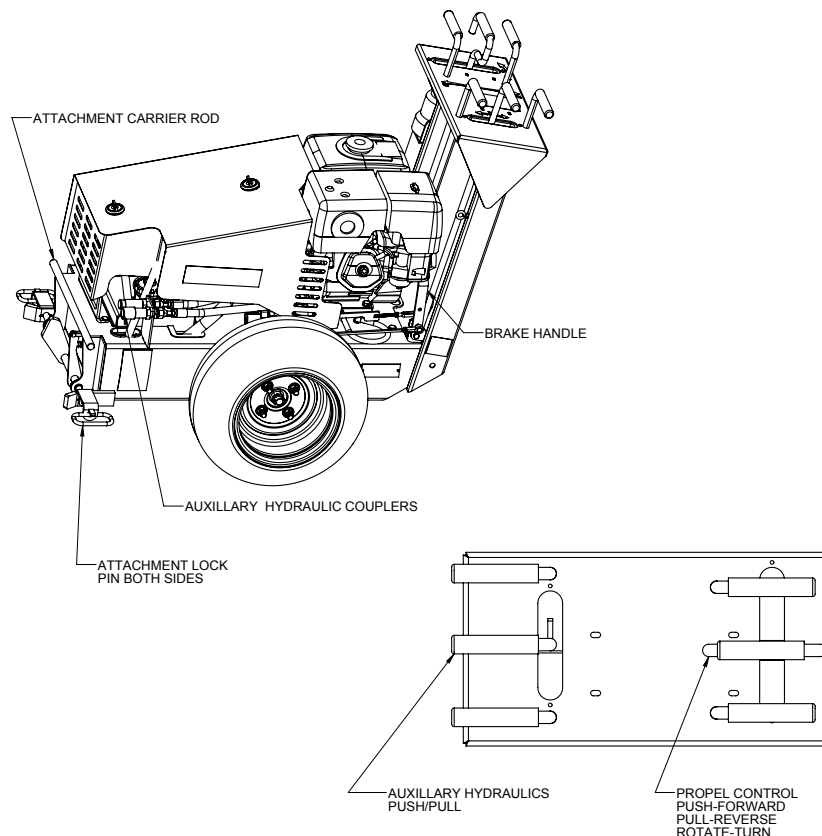
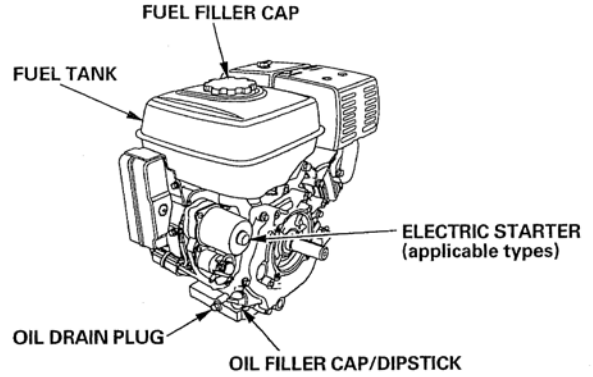


Figure 3. Operation

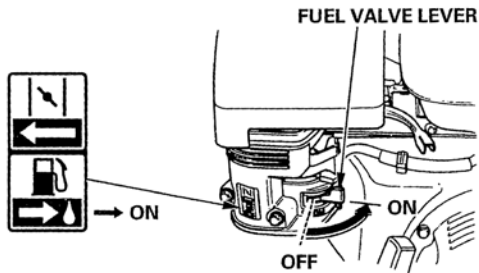
OPERATIONAL PROCEDURE - ENGINE CONTROLS

COMPONENT & CONTROL LOCATION



STARTING THE ENGINE

1. Move the fuel valve lever to the ON position.



2. To start a cold engine, move the choke lever or choke rod (applicable types) to the CLOSED position.

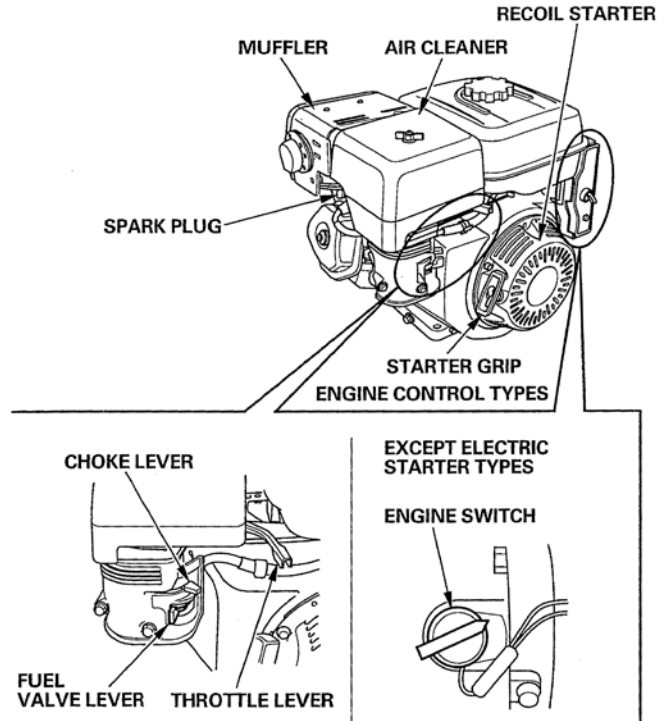
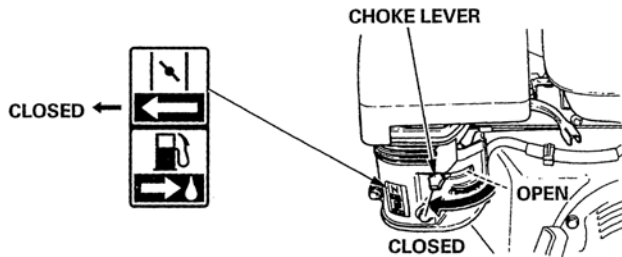


Figure 4. Operation

Figure 5. Operation

MAINTENANCE

ENGINE

See Honda owners manual for complete operation and maintenance information.

DRIVE COUPLER

Power is transmitted from the engine to the pumps through the drive coupler. If hydraulic functions fail, check that coupler insert is in tack. If engine turns over but pump does not, replace the insert.

- To replace insert, remove the four engine bolts and slide engine rearward to allow access to coupler insert. Inspect and replace if required.

AUXILLARY HYDRAULIC SYSTEM

Auxillary hydraulic power is provided with a .4 cubic inch displacement gear pump putting out 6 gallons per minute of flow. The flow of oil passes through a four-way directional control valve with a built in relief set at 2400 - 2500 PSI. If consistant stalling of an attachment is persistent, connect a pressure gauge to one of the auxillary couplers to check the pressure and adjust if required. To adjust, remove the proctective cap over the relief. Turn in set screw to increase or out to decrease.

PROPEL SYSTEM

The propel system is self contained and maintenance free. Each section of the tandem hydrostatic pump propels one wheel and is controlled by linkage from operators panel. If the propel or steering functions become less responsive, see your dealer for adjustments.

HYDRAULIC RESERVOIR

Check oil level daily and add if required; use ISO VG-46 or equivalent hydraulic oil. Oil is added through to return filter. Remove the filter cap, pull up filter cartridge and carefully add oil. Replace cartridge and cap. It is recommended to change the oil every 500 hours of use. To drain the oil, remove reservoir plug on front of tank. Dispose of used oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation.

- Refill the reservoir with 6.25 gallons of ICO VG-46 or equivalent hydraulic oil.

TIRES

Check and maintain 28 PSI in each drive wheel. Each attachment may require different pressures. Check attachment operators manual for recommended tire pressures. Check that brake on left wheel has sufficient tension to hold wheel from turning. Adjust tension rod if required.

ATTACHMENT LOCK PIN

Keep pins and spring free of build up of soil or trash. Lightly lubricate the exposed areas on end of pins to allow pins to slide into receiver holes on attachments.

MAINTENANCE

The information in this section is written for operators who possess basic mechanical skills. Should you need help, your dealer has trained service technicians available. For your protection, read and follow all safety information in this manual.

Regular preventive maintenance and immediate repair of broken or worn parts will ensure maximum efficiency and long life.

MAINTENANCE SCHEDULE

Procedure	Before Each Use	25 Hours	50 Hours	After Each Use
Hardware - Inspect and Tighten	x			
Engine & Air Filter - Check & Clean if necessary	x			
Grease Fittings - See Lubrication Points		x		
Engine Oil - Check Level - Change*	x		x	
Hoses, Tubes & Fittings - Check for Leaks	x			
Tire Pressure Check	x			
Wash Unit - Remove grease & debris				x

* See Hondal Manual for recommended oil

MAINTENANCE - LUBRICATION

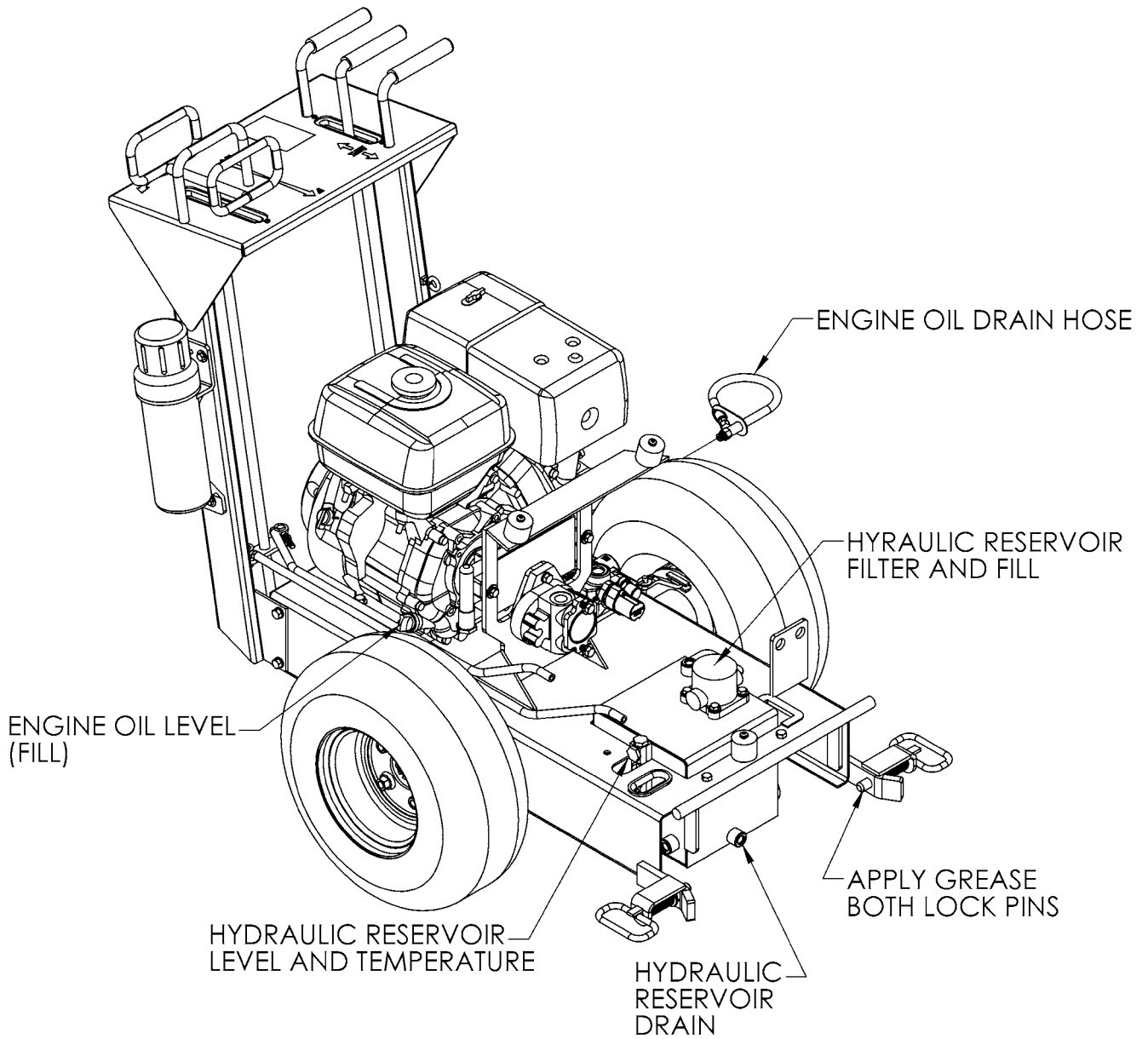


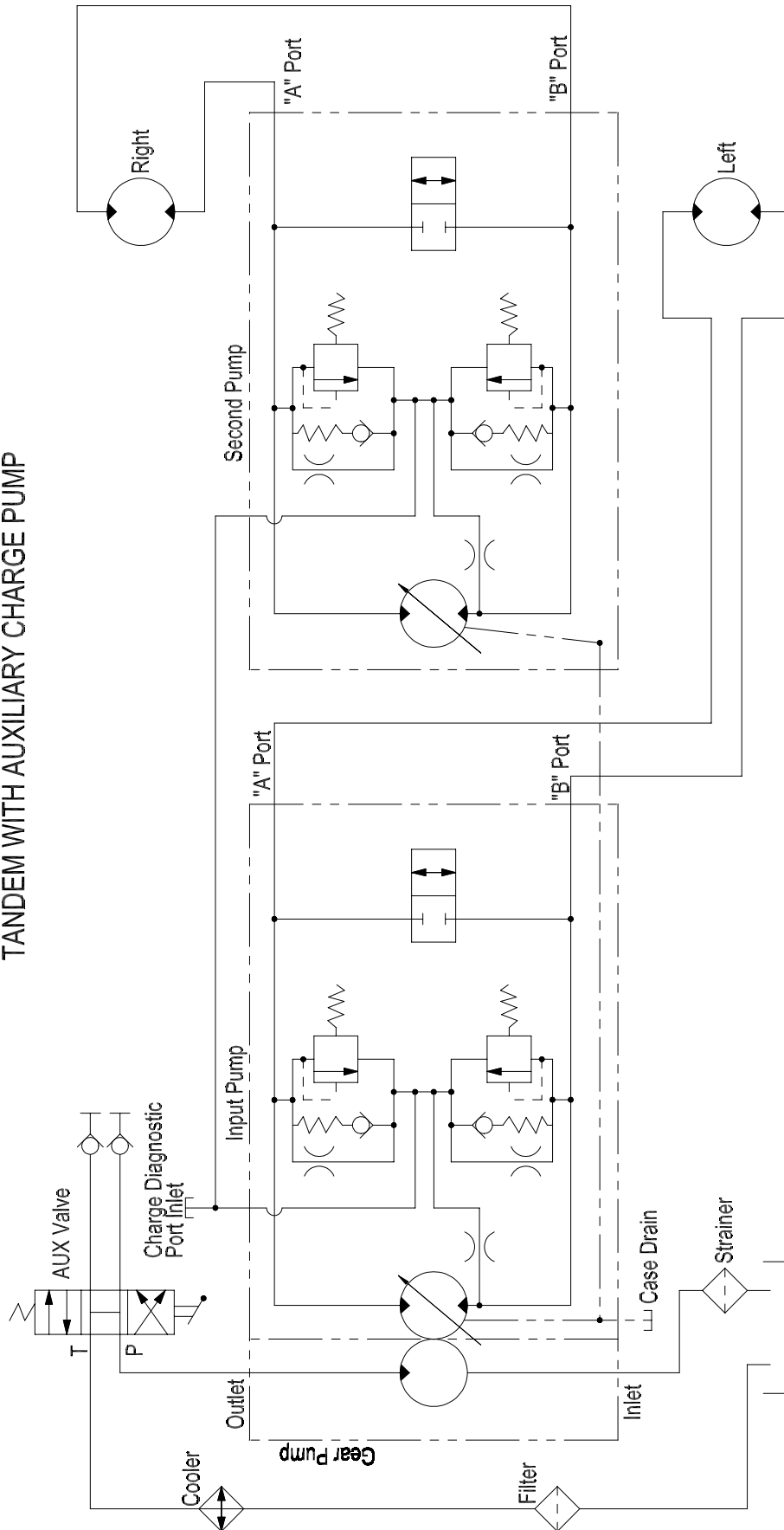
Figure 6. Lubrication

TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Engine will not pull over	Crank case filled with fuel (fuel shut off valve was not in closed position during transport)	Drain engine oil and refill crank case with recommended engine oil.
Engine shuts down	Too steep of slope Low oil shut off stops the engine	Work diagonally to minimize angle.
Lack of power for attachments	Relief valve setting too low	Reset relief pressure as described in maintenance section
Propel & Steering	Linkage or hydrostatic controls out of position	See your dealer to have adjustments made
Brake slipping	Pads worn or linkage out of adjustment	Readjust brake rod to proper tension
Coupler pins not engaging	Pin springs loaded up with rock and debris	Clear pin assemblies and lube contact area

HYDRAULIC SCHEMATIC

HYDRAULIC SCHEMATIC TANDEM WITH AUXILIARY CHARGE PUMP



ASSEMBLY - ENGINE GAS, MANUAL START

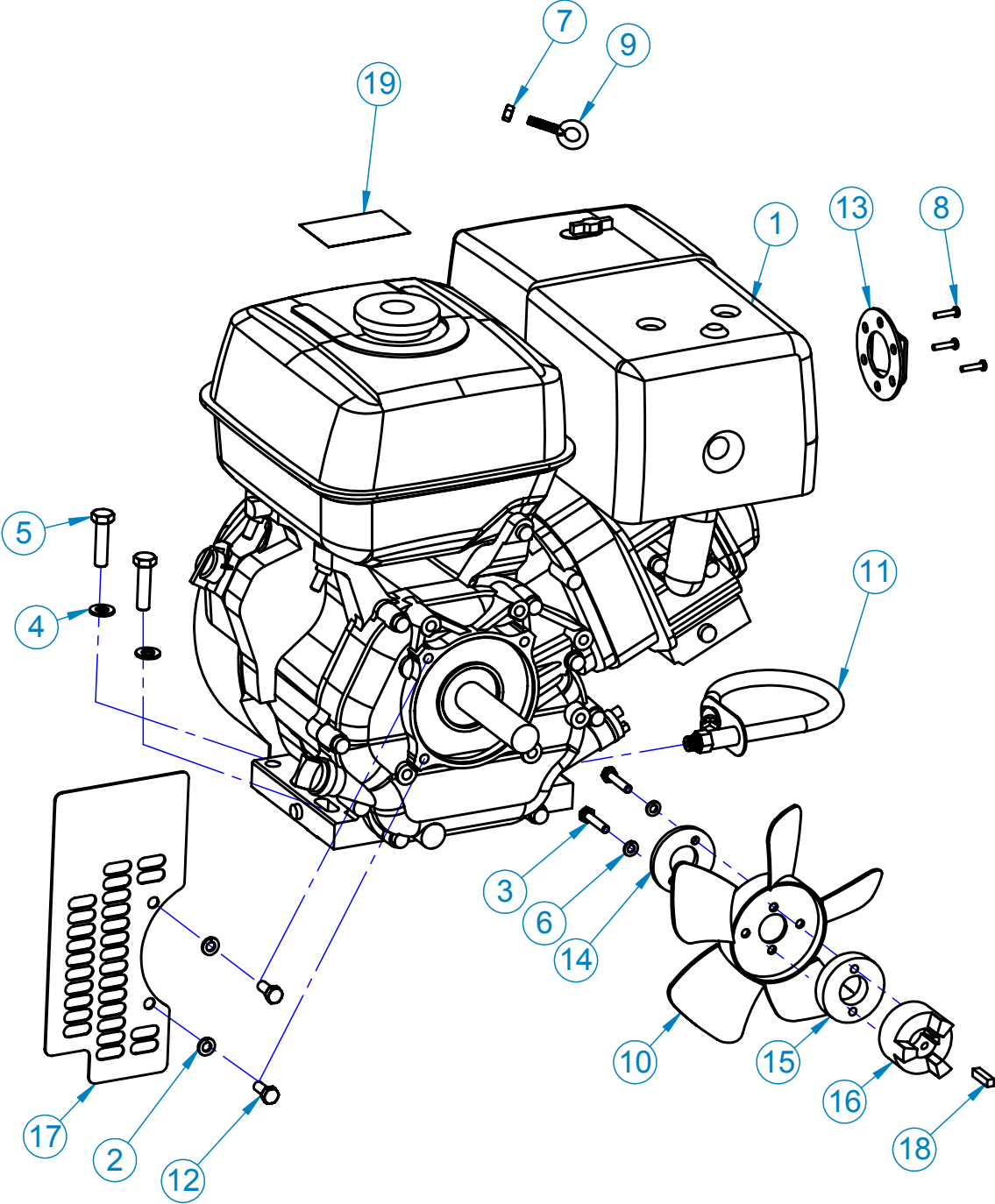


Figure 7.

ASSEMBLY - ENGINE GAS PARTS LIST

<u>ITEM</u>	<u>PART</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1.	03-9601	1	Engine, Honda, GX390
2.	07-3273	2	Washer, Lock, Split, Medium, 5/16
3.	07-3638	2	Screw, HHC, Gr8, 1/4-20 x 1 1/4
4.	07-3745	4	Washer, Flat, CL8.8, M10
5.	07-3751	4	Screw, HHC, CL10.9, M10-1.5 x 40mm
6.	07-4038	2	Washer, Lock, Split, Medium, 1/4
7.	07-4039	1	Nut, Hex, Gr8, 1/4
8.	07-5013	3	Screw, Sheet, Metal, Pan Head, Phillips, 8 x 3/4
9.	07-5847	1	Bolt, Eye, 1/4-20 x 2
10.	07-7355	1	Fan
11.	07-7356	1	Hose, Drain
12.	07-7373	2	Screw, HHC, Gr8, 5/16-24 x 3/4
13.	07-7420	1	Deflector, Exhaust
14.	13-60024	1	Fan, Washer
15.	13-60025	1	Plate, Coupler, Spacer
16.	13-60107	1	Rod, Drive, Coupling, Tapped
17.	13-60219	1	Plate, Shield, Back
18.	13-60223	1	Key, 1/4 x 1
19.	50-0821	1	Label, Notice, Shut off Fuel

ASSEMBLY - CONTROL STATION

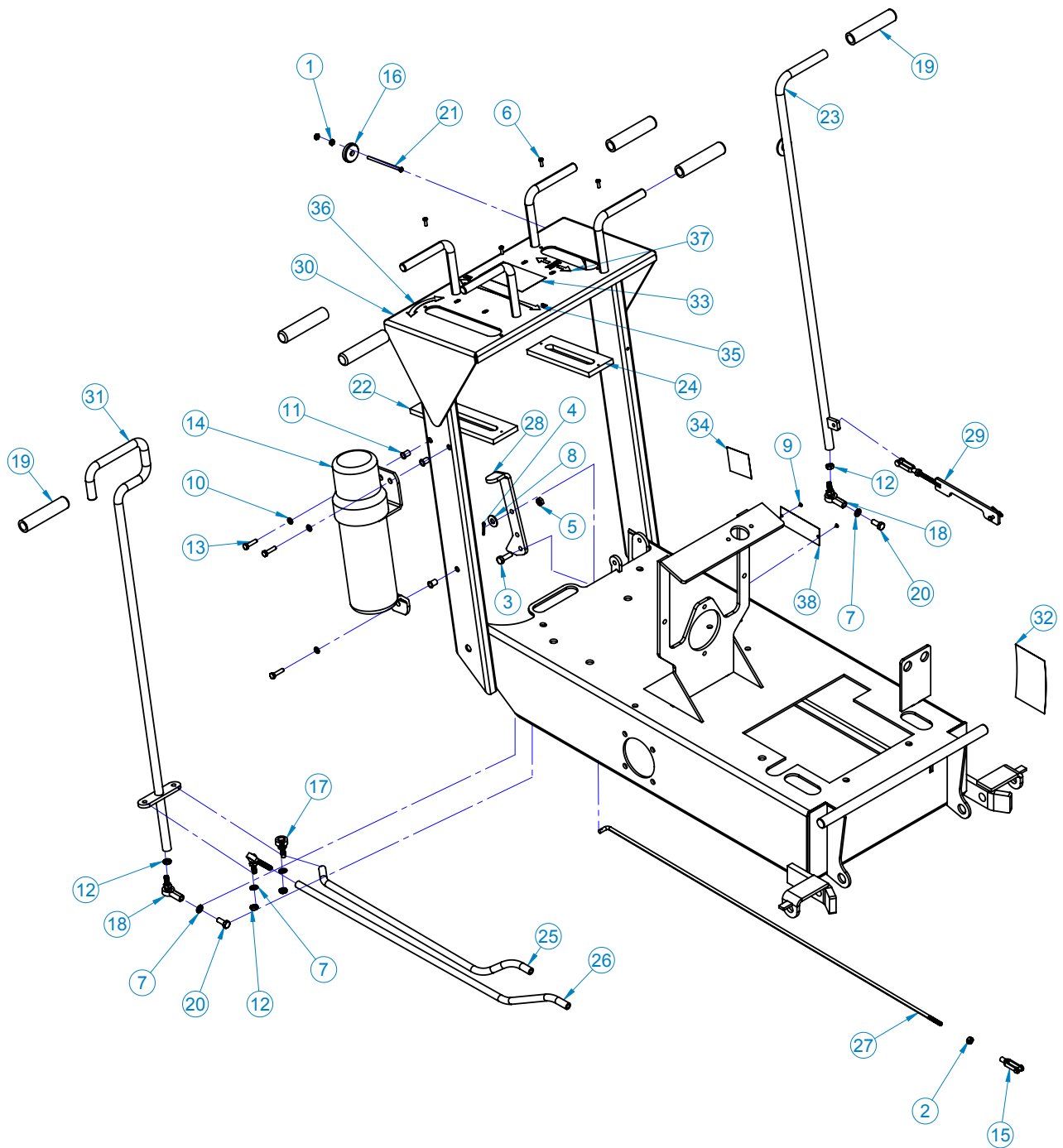


Figure 8.

ASSEMBLY - CONTROL STATION PARTS LIST

<u>ITEM</u>	<u>PART</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1.	07-0141	2	Nut, Hex, Gr2, #10-24
2.	07-0145	1	Nut, Hex, Gr8, 1/4-28
3.	07-1714	1	Screw, HHC, Gr8, 5/16-18 x 1
4.	07-1779	1	Pin, Cotter, 3/32 x 3/4
5.	07-1810	1	Nut, Hex, Lock, Gr8, 5/16-18
6.	07-2908	4	Screw, Pan Head, #8, 16 x 3/8
7.	07-3273	4	Washer, Lock, Split, Medium, 5/16
8.	07-3275	1	Washer, Flat, Gr8, 5/16
9.	07-3624	2	Tack, Metal
10.	07-3728	3	Washer, Flat, CL8.8, M6
11.	07-3922	3	Nut, Insert, M6 x 1
12.	07-4859	4	Nut, Hex, Jam, Gr8, 5/16-24
13.	07-6297	3	Screw, HHC, CL10.9, M6 x 1.25mm
14.	07-6869	1	Manual, Holder
15.	07-7261	1	Yoke, Adjustment, 1/4-28UNF, 1/4 Pin
16.	07-7369	1	Magnet, 1.4 x .38 x .281
17.	07-7370	2	Ball Joint, End, 5/16-24
18.	07-7371	2	Ball Joint, End, 5/16-24 F5SBY
19.	07-7372	6	Handle, Grip, Foam, 5/8
20.	07-7373	2	Screw, HHC, Gr8, 5/16-24 x .75
21.	07-7412	1	Screw, Flat Head, Slotted, 10-24 x 3 1/2
22.	13-60027	1	Guide, Control, Long
23.	13-60172	1	Auxillary, Control Shaft
24.	13-60174	1	Guide, Control, Short
25.	13-60175	1	Tube, Round, .50 x 11Ga, Offset, Left
26.	13-60176	1	Tube, Round, .50 x 12W, Propel Link, Right
27.	13-60184	1	Rod, .25 x 35.3, with Hole
28.	13-60185	1	Plate, Angle, Latch Lever
29.	13-60189	1	Assembly, Auxillary, Rod
30.	13-60191	1	Weld, Main Body
31.	13-60226	1	Weld, Steering, Lever
32.	50-0724	1	Label, Warning, High Pressure Fluid Hazard
33.	50-0813	1	Label, Operator Warning
34.	50-0814	1	Label, Brake
35.	50-0815	1	Label, Arrow, Forward/Reverse
36.	50-0816	1	Label, Arrow Steer
37.	50-0817	1	Label, Arrow Auxillary
38.	P985000	1	Serial Number Tag

ASSEMBLY - WHEELS & HOOK-UP

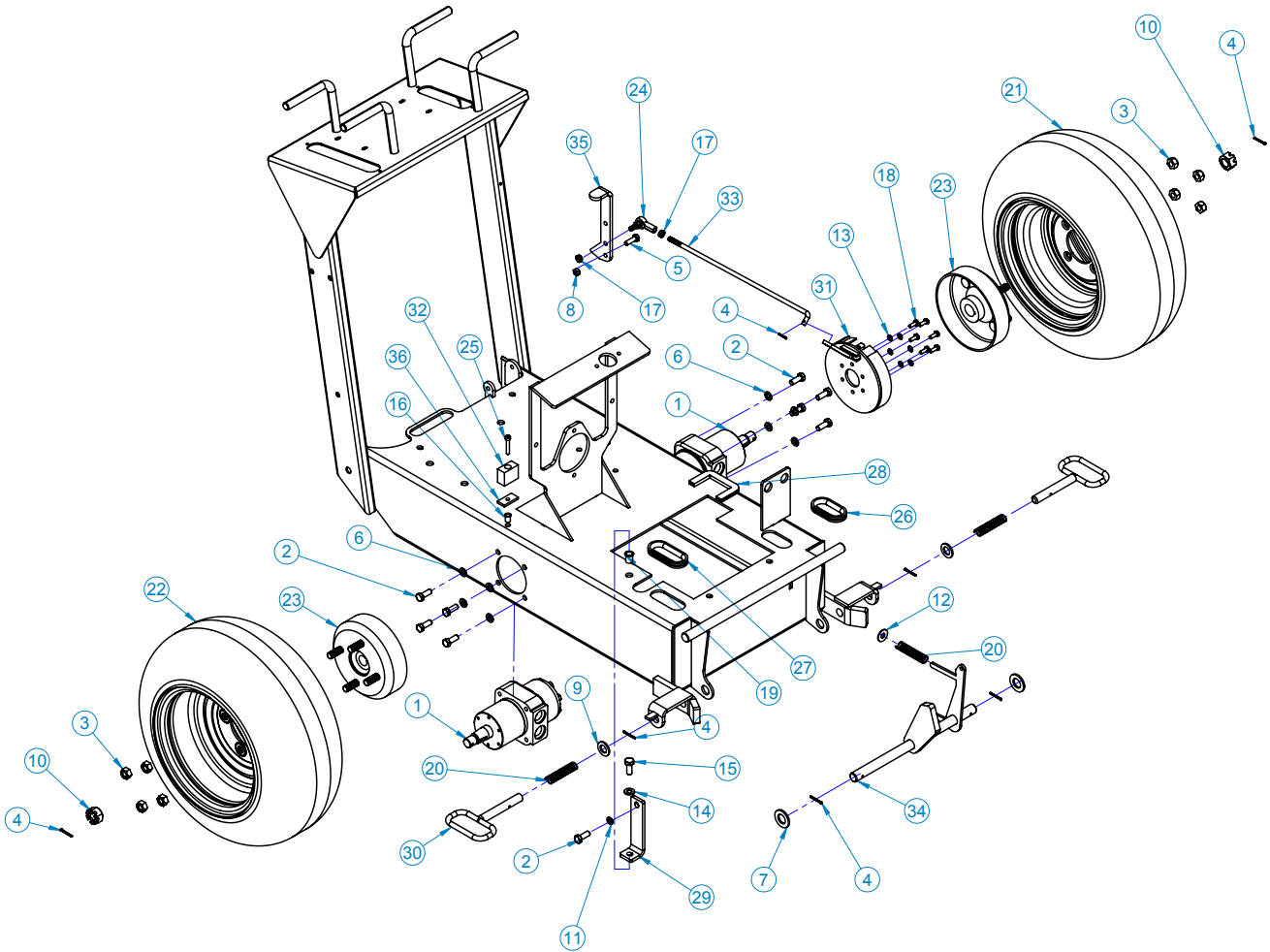


Figure 9.

ASSEMBLY - WHEELS AND HOOK-UP PARTS LIST

<u>ITEM</u>	<u>PART</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1.	03-5547	2	Motor, Wheel
2.	07-0018	9	Screw, HHC, Gr8, 3/8-16 x 1
3.	07-0144	8	Nut, Lug, Gr2, 1/2-20 x 5/8
4.	07-0205	7	Pin, Cotter, Gr2, 1/8 x 1
5.	07-1714	1	Screw, HHC, Gr8, 5/16-18 x 1
6.	07-1718	8	Washer, Lock, Split, Medium, 3/8
7.	07-1782	2	Washer, Flat, Gr2, 3/4 SAE, 1 1/2
8.	07-1810	1	Nut, Hex, Lock, Gr8, 5/16-18
9.	07-2300	2	Washer, Flat, CL8.8, M16
10.	07-3149	2	Nut, Hex, Slotted, Gr5, 3/4-16
11.	07-3273	1	Washer, Lock, Split, Medium, 5/16
12.	07-3279	1	Washer, Flat, Gr8, 3/8
13.	07-3730	6	Washer, Lock, Split, Medium, M6
14.	07-3745	1	Washer, Flat, CL8.8, M10
15.	07-3748	1	Screw, HHC, CL10.9, M10-1.5 x 25mm
16.	07-3922	1	Nut, Insert, M6 x 1, Grip Length .165-.251
17.	07-4859	2	Nut, Hex, Jam, Gr8, 5/16-24
18.	07-5337	6	Screw, HHC, CL8.8, M6-1 x 16mm
19.	07-6682	1	Nut, Insert, M10-1.5, 3.8-7.9
20.	07-6915	3	Spring, Compression, .080 Wire x .845 x 3
21.	07-7357-L	1	Wheel, with Tire, Left
22.	07-7357-R	1	Wheel, with Tire, Right
23.	07-7367	2	Brake, Hub, 4 Bolt
24.	07-7371	1	Ball, Joint, ENd, 5/16-24
25.	07-7385	1	Screw, Socket Head, CL8.8, M6-1 x 35mm
26.	09-0088	1	Edging, 6.92 Long
27.	09-0088	1	Edging, 7.92 Long
28.	09-0088	1	Edging, 6.5 Long
29.	13-60017	1	Plate, Support, Stand
30.	13-60045	2	Weld, Release Pin
31.	13-60047	1	Assembly, Brake Shoe
32.	13-60117	1	Propel Link Guide
33.	13-60173	1	Rod, .313 x 14.325, with 5/16-24 End
34.	13-60183	1	Weld, Angle, Latch
35.	13-60185	1	Plate, Angle, Latch, Lever
36.	13-60222	1	Plate, 1.5 x .75, with Hole

ASSEMBLY - RESERVOIR & HOOD

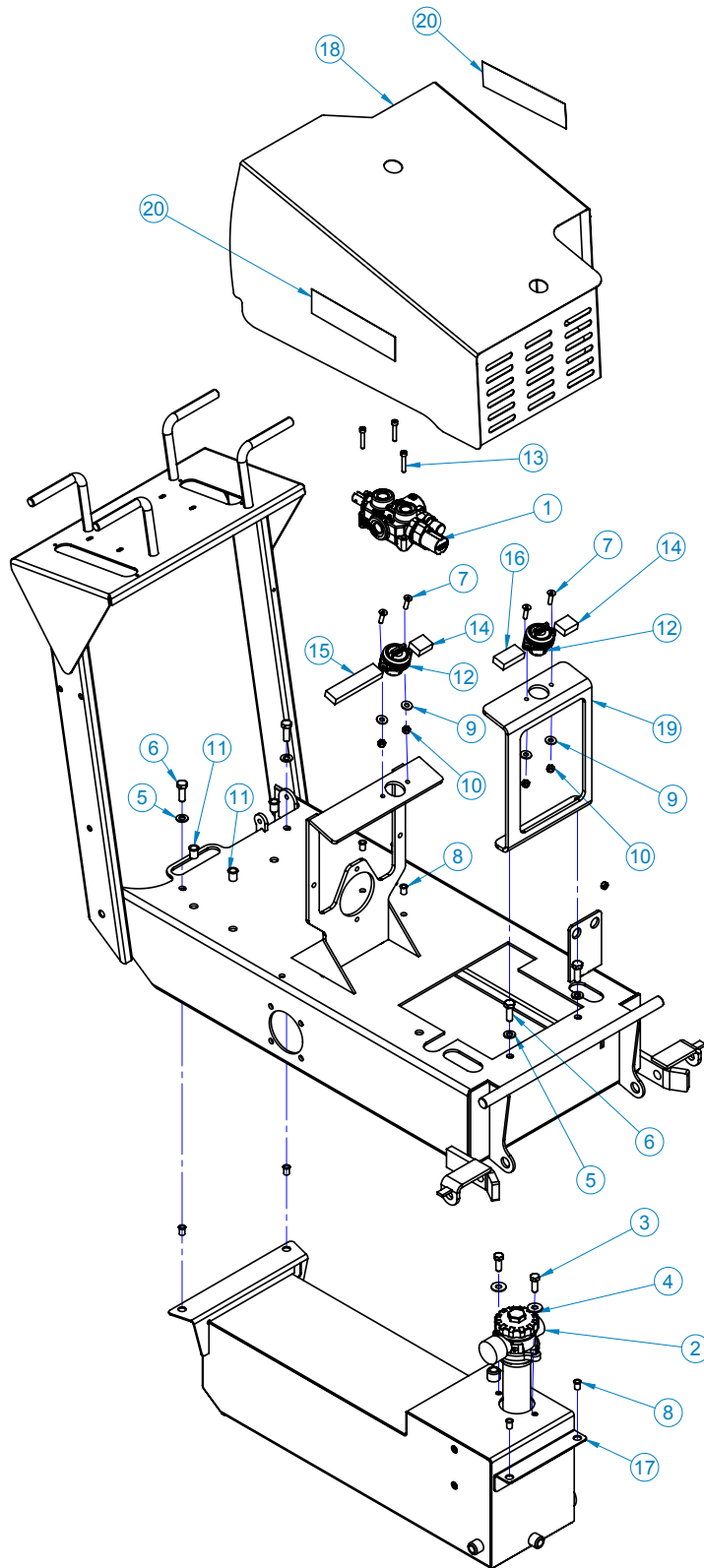


Figure 10.

ASSEMBLY - RESERVOIR & HOOD PARTS LIST

<u>ITEM</u>	<u>PART</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1.	03-5546	1	4 Way AO Valve
2.	03-5552	1	Filter
3.	07-0018	2	Screw, HHC, Gr8, 3/8-16 x 1
4.	07-3279	2	Washer, Flat, Gr8, 3/8
5.	07-3745	4	Washer, Flat, CL8.8, M10
6.	07-3749	4	Screw, HHC, CL10.9, M10-1.5 x 30mm
7.	07-3858	4	Screw, Socket Head, Flat, Gr8, 1/4-20 x 1
8.	07-3922	7	Nut, Insert, M6 x 1, Grip Length .165-.251
9.	07-4032	4	Washer, Flat, Gr8, 1/4
10.	07-4033	4	Nut, Hex, Gr8, Nylock, 1/4-20
11.	07-6682	4	Nut, Insert, M10-1.5, 3.8-7.9
12.	07-7377	2	Hood, Latch
13.	07-7385	3	Screw, Socket Head, CL8.8, M6-1 x 35mm
14.	09-0282	2	Rubber, Neoprene, 1/2 x 1 x 1.25
15.	09-0282	1	Rubber, Neoprene, 1/2 x 1 x 4.5
16.	09-0282	1	Rubber, Neoprene, 1/2 x 1 x 2
17.	13-60168	1	Reservoir, Weldment
18.	13-60200	1	Weld, Hood
19.	13-60220	1	Plate, Hood, Pad, Stand, Front
20.	P975800	2	Decal, Harley Logo, Black

ASSEMBLY - HYDRAULIC

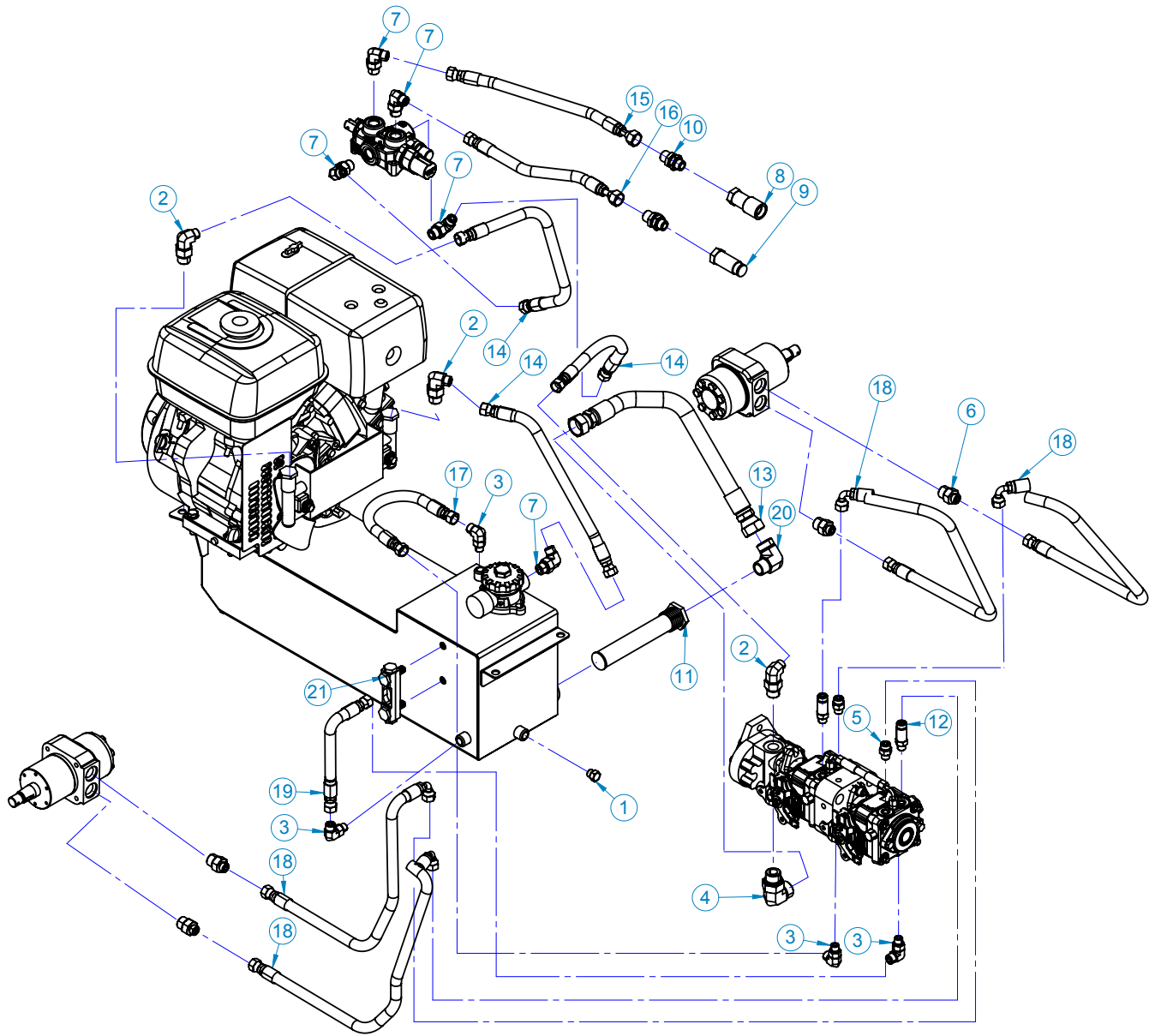


Figure 11.

ASSEMBLY - HYDRAULIC PARTS LIST

<u>ITEM</u>	<u>PART</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1.	03-1613	1	Plug, Hex Head, 6B
2.	03-1953	3	Elbow, 90°, 6MF-10MB
3.	03-2092	4	Elbow, 90°, 9/16MOR, 3/8MFS
4.	03-2177	1	Elbow, 90°, 12MB-12MF
5.	03-2291	2	Fitting, Adapter, 3/8MFS, 9/16MOR
6.	03-2564	4	Fitting, 6MF-10MB
7.	03-3320	5	Elbow, 90°, 6MF-8MB
8.	03-3861	1	Quick Disconnect, 8FF, Female, 8FB
9.	03-3862	1	Quick Disconnect, 8FF, Male, 8FB
10.	03-4903	2	Fitting, Bulkhead, 8MOR, 8MFS
11.	03-5551	1	Strainer, Tank
12.	03-5557	1	Fitting, 6MF-6MB
13.	03-5559	1	Hose, .75 x 17, 12FF-12FF, 3K
14.	03-5560	3	Hose, .38 x 19, 6FF-6FF, 3K
15.	03-5563	1	Hose, .38 x 15, 6FF-8FF, LG, 3K
16.	03-5564	1	Hose, .38 x 13, 6FF-8FF, LG, 3K
17.	03-5565	1	Hose, .38 x 17, 6FF-6FF, 3K
18.	03-5566	4	Hose, .38 x 29, 6FF-6FF90, 3K
19.	03-5567	1	Hose, .38 x 10.5, 6FF-6FF, 3K
20.	03-5568	1	Elbow, 90°, 12MF-12MP
21.	P297305	1	Sight Level, Temp Gage

ASSEMBLY - PUMP

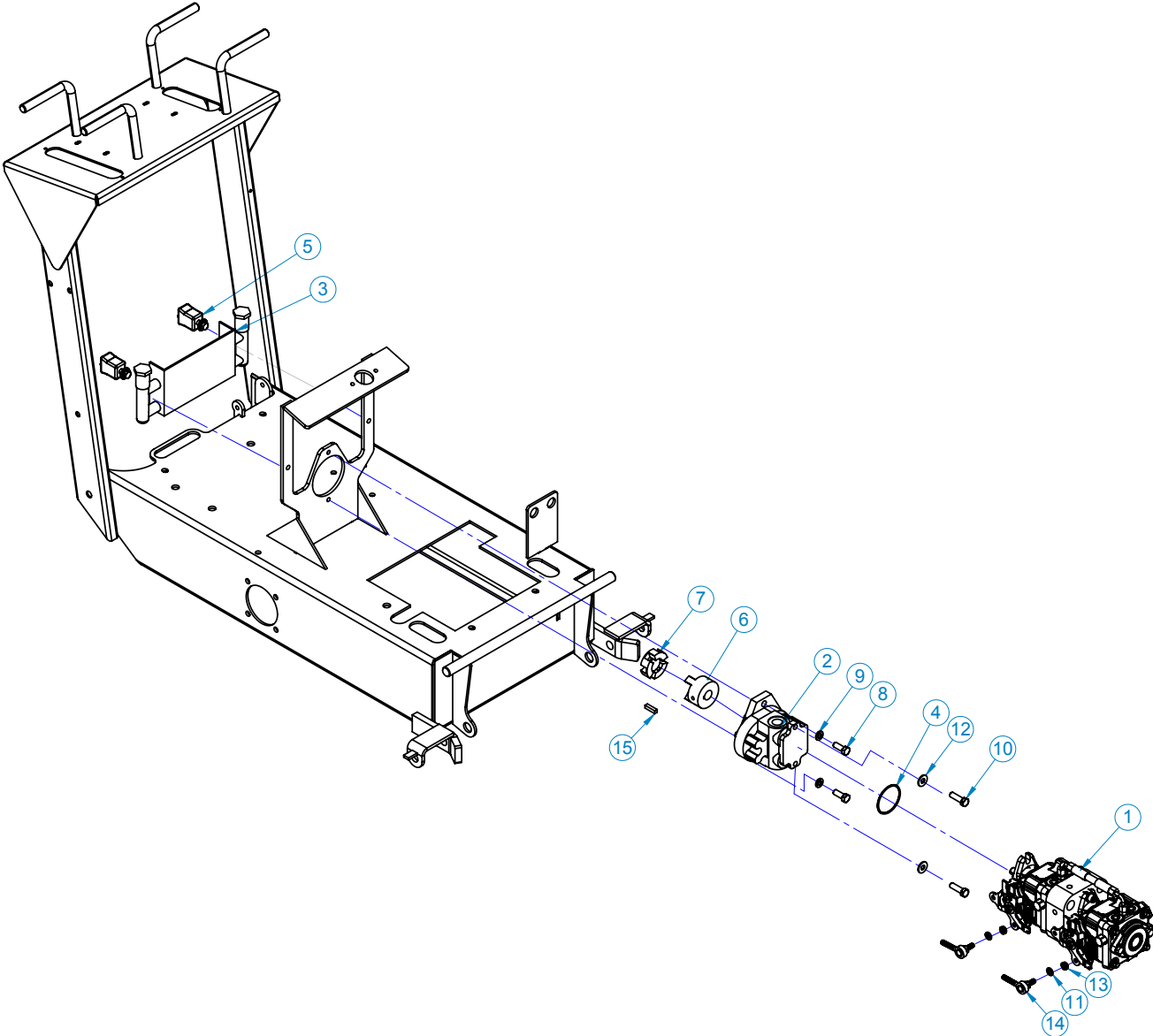


Figure 12.

ASSEMBLY - PUMP PARTS LIST

<u>ITEM</u>	<u>PART</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1.	03-5544	1	Pump, 12 CID, Tandem
2.	03-5545	1	Pump, Gear, Eaton
3.	03-5548	1	Cooler
4.	03-5549	1	O-Ring, 2 1/8 x .094
5.	03-5550	2	Holder, Rubber
6.	05-1483	1	Coupler, 3/4 Drive
7.	05-1484	1	Coupler, Drive, Insert
8.	07-0018	2	Screw, HHC, Gr8, 3/8-16 x 1
9.	07-1718	2	Washer, Lock, Split, Medium, 3/8
10.	07-2116	2	Screw, HHC, Gr8, 3/8-16 x 1 1/4
11.	07-3273	2	Washer, Lock, Split, Medium, 5/16
12.	07-3275	2	Washer, Flat, Gr8, 5/16
13.	07-4859	2	Nut, Hex, Jam, Gr8, 5/16-24
14.	07-7370	2	Ball, Joint, End, 5/16-24
15.	13-60223	1	Key, 1/4 x 1

Limited Warranty

Except for the Excluded Products as described below, all new products are warranted to be free from defects in material and/or workmanship during the Warranty Period, in accordance with and subject to the terms and conditions of this Limited Warranty.

1. Excluded Products. The following products are excluded from this Limited Warranty:

(a) Any cable, part that engages with the ground (i.e. sprockets), digging chain, bearing, teeth, tamping and/or demolition head, blade cutting edge, pilot bit, auger teeth and broom brush that either constitutes or is part of a product.

(b) Any product, merchandise or component that, in the opinion of Paladin Light Construction¹, has been (i) misused; (ii) modified in any unauthorized manner; (iii) altered; (iv) damaged; (v) involved in an accident; or (vi) repaired using parts not obtained through Paladin Light Construction.

2. Warranty Period. The Limited Warranty is provided only to those defects that occur during the Warranty Period, which is the period that begins on the first to occur of: (i) the date of initial purchase by an end-user, (ii) the date the product is first leased or rented, or (iii) the date that is six (6) months after the date of shipment by Paladin Light Construction as evidenced by the invoiced shipment date (the "Commencement Date") and ends on the date that is twelve (12) months after the Commencement Date.

3. Terms and Conditions of Limited Warranty. The following terms and conditions apply to the Limited Warranty hereby provided:

(a) Option to Repair or Replace. Paladin Light Construction shall have the option to repair or replace the product.

(b) Timely Repair and Notice. In order to obtain the Limited Warranty, (i) the product must be repaired within thirty (30) days from the date of failure, and (ii) a claim under the warranty must be submitted to Paladin Light Construction in writing within thirty (30) days from the date of repair.

(c) Return of Defective Part or Product. If requested by Paladin Light Construction, the alleged defective part or product shall be shipped to Paladin Light Construction at its manufacturing facility or other location specified by Paladin Light Construction, with freight PRE-PAID by the claimant, to allow Paladin Light Construction to inspect the part or product.

Claims that fail to comply with any of the above terms and conditions shall be denied.

LIMITATIONS AND EXCLUSIONS.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY BASED ON A COURSE OF DEALING OR USAGE OF TRADE.

IN NO EVENT SHALL PALADIN LIGHT CONSTRUCTION BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES.

IN NO EVENT SHALL PALADIN LIGHT CONSTRUCTION BE LIABLE FOR ANY LOSS OR CLAIM IN AN AMOUNT IN EXCESS OF THE PURCHASE PRICE, OR, AT THE OPTION OF PALADIN LIGHT CONSTRUCTION, THE REPAIR OR REPLACEMENT, OF THE PARTICULAR PRODUCT ON WHICH ANY CLAIM OF LOSS OR DAMAGE IS BASED. THIS LIMITATION OF LIABILITY APPLIES IRRESPECTIVE OF WHETHER THE CLAIM IS BASED ON BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE OR OTHER CAUSE AND WHETHER THE ALLEGED DEFECT IS DISCOVERABLE OR LATENT.

¹Attachment Technologies Inc., a subsidiary of Paladin Brands Holding, Inc. (PBHI) is referred to herein as Paladin Light Construction.

February 10, 2010

NOTES



The Power of Combined Excellence