


Repair Instructions and Parts List 309887B



Pressure Washers

 This manual contains important warnings and information.
READ AND KEEP FOR REFERENCE.

INSTRUCTIONS

APS2730H


Model 246798, Series A
 2700 psi (186 bar, 18.6 MPa) Operating Pressure
 3000 psi (210 bar, 21.0 MPa) Maximum Working Pressure


APS3030H

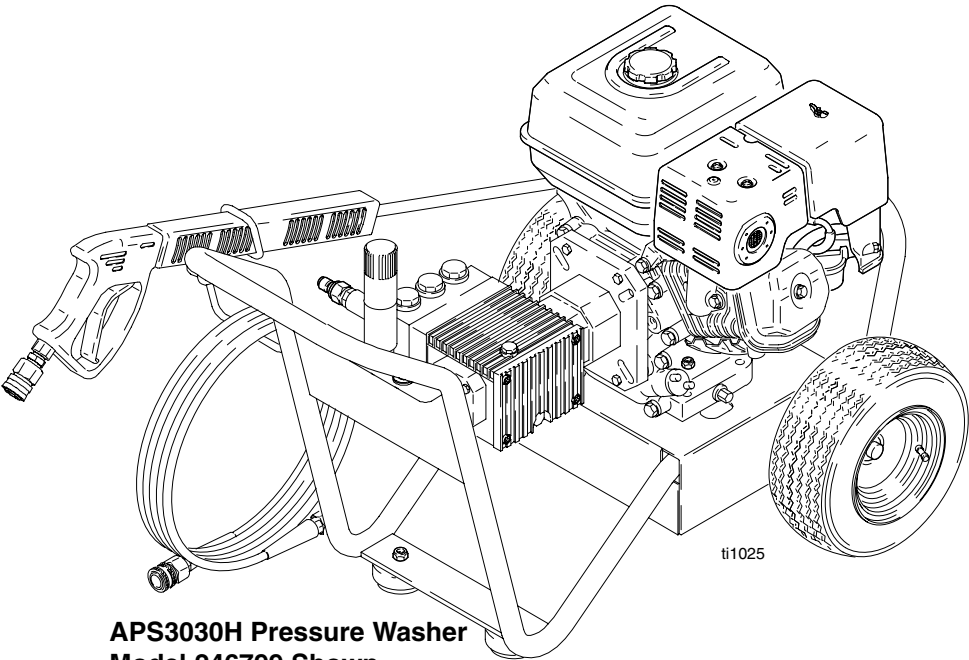
Model 246799, Series A
 3000 psi (210 bar, 21.0 MPa) Operating Pressure
 3300 psi (227.5 bar, 22.75 MPa) Maximum Working Pressure

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 Related manuals

 309886



**APS3030H Pressure Washer
 Model 246799 Shown**

WARNING



FUEL HAZARD

The fuel used in this equipment is flammable. When spilled on a hot surface it can ignite and cause a fire. Do not fill fuel tank while engine is running or hot.



INJECTION HAZARD

Spray from gun, leaks or ruptured components can inject fluid into your body and cause an extremely serious injury, including the need for amputation. Splashing fluid in the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate medical attention.**
- Do not point gun at anyone or any part of the body.
- Do not put hand or fingers over the spray tip, and do not stop or deflect fluid leaks with your hand, body, glove or rag.
- Do not “blow back” fluid; this is not an air spray system.
- Always have tip guard and trigger guard on gun when spraying.
- Engage trigger safety whenever you stop spraying.
- Follow the **Pressure Relief Procedure** on page 4 when you are instructed to relieve pressure; stop spraying; check, clean, or service any system equipment; or install or change spray tips.
- Tighten all fluid connections before each use.
- Check the hoses, tubes and couplings daily. Replace worn or damaged parts immediately. Permanently coupled hoses cannot be repaired.
- Handle and route hoses and tubes carefully. Keep hoses and tubes away from moving parts and hot surfaces. Do not use the hoses to pull equipment. Do not expose ASM hoses to temperatures above 150°F (65°C) or below -40°F (-40°C).



TOXIC FLUID HAZARD

Hazardous fluid or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, or swallowed.

To help prevent injury or death from toxic fluids

- Know specific hazards of fluid you are using; store hazardous fluid in approved tub; dispose of hazardous fluid according to all local, state, and national guidelines.
- Always wear protective eyewear, gloves, clothing, and respirator as recommended by fluid and solvent manufacturer.



FLUID SPLASHBACK HAZARD

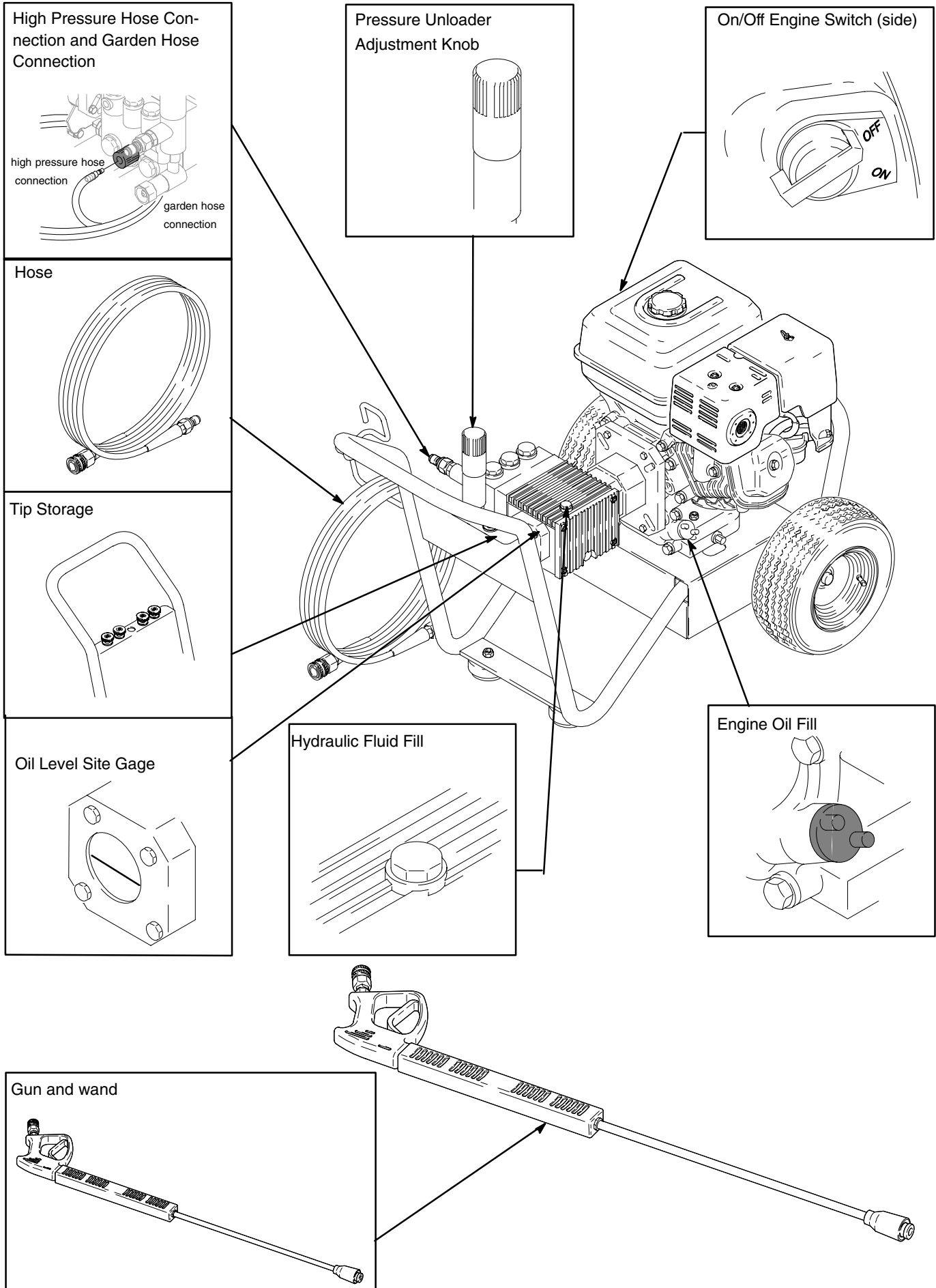
To avoid splashback of fluid while spraying, make sure the spray gun is assembled with the correct gasket for the fluid being sprayed.



EXHAUST HAZARD

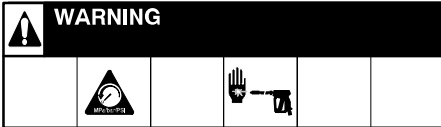
The exhaust contains poisonous carbon monoxide which is colorless and odorless. Do not operate this equipment in a closed building.

Component Identification

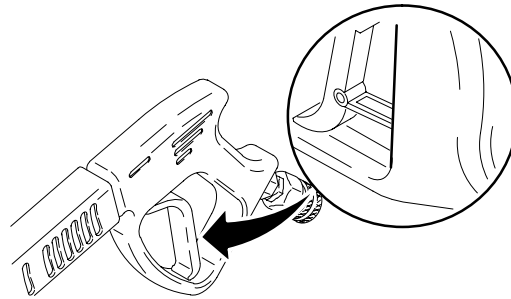


Pressure Relief

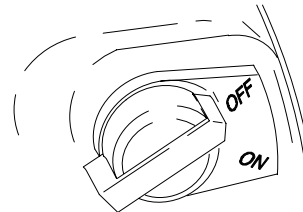
Follow these instructions whenever you are instructed to relieve pressure, stop spraying for more than 10 minutes, check or service the equipment, or install or clean the spray nozzle.



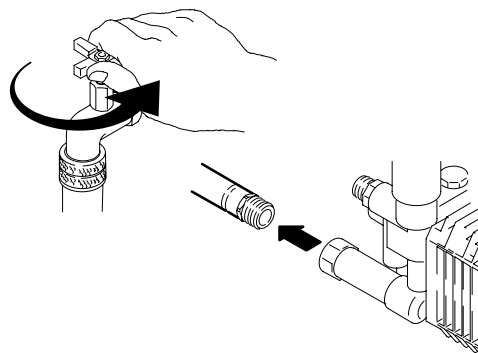
1. Engage trigger safety latch.



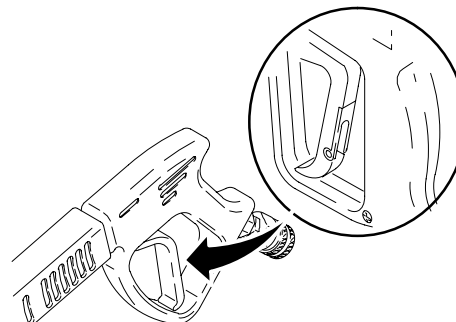
2. Turn Pressure Washer off and remove ignition cable from spark plug.



3. Shut off water supply. Disconnect from water.



4. Remove trigger safety latch and trigger gun to relieve pressure. Then engage the safety latch.



Note: If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved after following this procedure, disengage trigger safety latch and trigger gun again.

Maintenance Chart



Relieve pressure, page 4.

Interval	What to do
Daily	Clean water inlet screen and filter. Check engine and pump oil levels. Fill as necessary. Check gasoline level. Fill as necessary.
After first 5 hours of operation	Change engine break-in oil. Drain oil when warm. Use SAE 30 or 10W–30 detergent oil.
After every 25 hours of operation	Clean and remove air cleaner foam. Wash with water and detergent. Dry thoroughly. Rub with oil, and squeeze to distribute oil.
After first 50 hours of operation	Change pump break-in oil. Use approved SAE 20/30 pump oil.
After every 100 hours of operation, or every 3 months	Clean or replace paper air cleaner cartridge. Tap gently to remove dirt. Change engine oil. Use SAE 30 or 10W–30 detergent oil.
After every 500 hours of operation, or every 6 months	Change pump oil. Use approved SAE 20/30 pump oil.

Troubleshooting



Relieve pressure, page 4.

Problem	Cause	Solution
Engine will not start or is hard to start.	No gasoline in fuel tank or carburetor	Fill tank with gasoline, open fuel shutoff valve. Check fuel line and carburetor.
	Low oil	Add oil to proper level.
	Start/Stop switch in STOP position	Move switch to START position
	Water in fuel or old fuel	Drain fuel tank and carburetor. Use new fuel and make sure spark plug is dry.
	Engine flooded or improperly choked	Open choke, pull engine starter rope several times to clear out fuel. Make sure spark plug is dry.
	Dirty air cleaner filter	Remove and clean.
	Spark plug dirty, wrong gap, or wrong type	Clean, adjust gap or replace.
	Gun not triggered	Trigger gun while starting engine.
	6.5 hp Briggs & Stratton model may experience "vapor lock" due to gas type and temperature	Allow unit to cool approximately 15 minutes and restart.
Engine misses or lacks power	Partially plugged air cleaner filter	Remove and clean.
	Valve adjustment (lash) worn	Adjust valve lash to manufacturer's specification.
	Spark plug dirty, wrong gap, or wrong type	Clean, adjust gap or replace.
Pressure is too low and/or pump runs roughly	Worn or wrong size tip	Replace with tip of proper size.
	Inlet filter clogged	Clean. Check more frequently.
	Worn packings, abrasives in water, or natural wear	Check filter. Replace packing.
	Inadequate water supply	Check water flow rate to pump.
	Fouled or dirty inlet or discharge valves	Clean inlet and discharge valve assemblies. Check filter.
	Restricted inlet	Garden hose might be collapsed or kinked.
	Worn inlet or discharge valves	Replace worn valves.
	Leaking high-pressure hose	Replace high-pressure hose.
Water leaks from under pump minifold	Worn packings	Install new packings.
Water on oil side of pump	Humid air condensing inside crankcase	Change oil as specified in Maintenance Chart (page 5).
	Worn packings	Install new packings.
	Oil seals leaking	Install new oil seals.

Problem	Cause	Solution
Packings are failing frequently or prematurely	Scored, damaged, or worn plungers	Install new plungers.
	Abrasive material in fluid being pumped	Install proper filtration on pump inlet plumbing.
	Inlet water temperature too high	Check water temperature. It should not exceed 160°F (70°C).
	Overpressurizing pump	Do not modify any factory-set adjustments.
	Excessive pressure due to partially plugged or damaged tip	Clean or replace tip. See Installing and Changing Spray Tips, Operating Instruction manual 309886.
	Pump running too long without spraying	Never run pump more than 10 minutes without spraying.
	Running pump dry	Do not run pump without water.
Strong surging at inlet and low pressure on discharge side	Foreign particles in inlet or discharge valve or worn inlet and/or discharge valves	Clean or replace valves.

Pump Service: APS2730H

Repair kits are available. See the **Parts Lists** (page 12). For the best results, use all parts in the kits.



Relieve pressure, page 4.

NOTES:

- Metric wrenches needed: 5 mm, 13 mm, 22 mm.
- Tool Kit 245618 contains tools for removing packing retainers.
- Drain and refill pump after 50 hours of operation.

Valves

Order Valve Assembly Kit 245606.

1. Remove hex plug from manifold using a 22 mm socket.
2. Examine o-ring seated under hex plug. Replace it if cut or distorted.
3. Remove valve assembly from cavity; the assembly might come apart.
4. Install new valve, o-ring and hex plug. Torque to 33 ft-lb (45 N•m).

NOTE: Retorque plunger after 5 hours of operation.

Pumping Section

1. Remove 8 capscrews and lockwashers from manifold using a 5 mm wrench.
2. Carefully separate manifold from crankcase.

NOTE: If stuck, tap manifold lightly with a soft mallet to loosen it.

⚠ CAUTION

To avoid damaging plunger or seals, keep manifold properly aligned with ceramic plungers when you remove it.

3. Carefully examine each plunger for any scoring or cracking, and replace as necessary.

Servicing Plungers

1. Turn plunger retaining nut 5 or 6 turns using a 13 mm wrench to loosen. Push plunger toward crankcase to separate plunger and retaining screw.
2. Remove nut from plunger. Examine and clean o-ring, backup ring, and copper bearing/gasket washer.

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3. Remove plunger and flinger from plunger shaft. Clean parts as necessary.

4. Inspect plunger shaft for oil leakage from crankcase. If leaking is obvious, replace oil seals. Otherwise, **DO NOT** remove these seals, they cannot be reused. Order Oil Seal Kit 245604 for replacing seals.

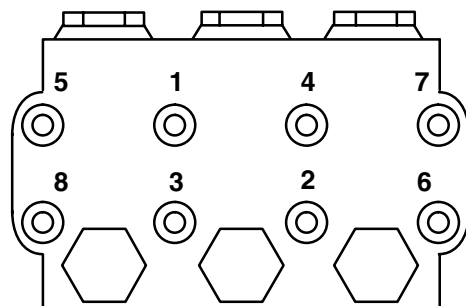
5. Lightly grease flinger (and oil seal if it is being replaced), and install on plunger shaft. Then install plunger.

6. Lightly grease retaining screw and outer end of plunger. Place washer, o-ring, and backup ring around screw, and install nut through plunger. Torque to 11 ft-lb (15 N•m).

NOTE: If replacing packings, see Servicing the V-packings page 9.

7. Lubricate outside of each plunger. Slide manifold onto crankcase, being careful not to damage seals.

8. Install cap screws and washers finger tight. Torque the screws to 8.8 ft-lb (12 N•m) following tightening pattern (Fig. 1). Uneven tightening could cause manifold to bind or jam.



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Fig. 1

Servicing V-Packings

1. Remove manifold as outlined in Pumping Section on page 8.
2. Carefully pull packing retainer from manifold. Examine o-ring, and replace if cut or damaged.
3. Remove v-packing and head ring. Pull out intermediate retainer ring. Remove second v-packing and second head ring.
4. Inspect all parts and replace as necessary.
5. Thoroughly clean packing cavities and examine for debris or damage.
6. Lightly grease packing cavities and replace the packings in the following order: head ring, v-packing, intermediate ring, head ring, v-packing, packing retainer. Install o-ring in retainer groove.
7. Reassemble manifold as instructed in Servicing Plungers on page 8.

⚠ CAUTION
Install parts in proper order and facing proper direction. Improperly installed parts will cause a malfunction.

Pump Service: APS3030H

Repair kits are available. See the **Parts Lists** (page 14). For the best results, use all parts in the kits.



Relieve pressure, page 4.

NOTES:

- Metric wrenches needed: 6 mm, 13 mm, 27 mm.
- Tool Kit 245618 contains tools for removing packing retainers .
- Drain and refill pump after 50 hours of operation.

Valves

Order Valve Assembly Kit 245606.

1. Remove hex plug from manifold using a 27 mm socket.
2. Examine o-ring seated under hex plug. Replace if cut or distorted.
3. Remove valve assembly from cavity; the assembly might come apart.
4. Install new valve, o-ring and hex plug. Torque to 73 ft-lb (99 N•m).

NOTE: Retorque plug after 5 hours of operation.

Pumping Section

1. Remove 8 capscrews and lockwashers from manifold using a 6 mm wrench.
2. Carefully separate manifold from crankcase.

NOTE: If stuck, tap manifold lightly with a soft mallet to loosen it.

⚠ CAUTION

To avoid damaging plunger or seals, keep manifold properly aligned with ceramic plungers when you remove it.

3. Carefully examine each plunger for any scoring or cracking, and replace as necessary.

Servicing Plungers

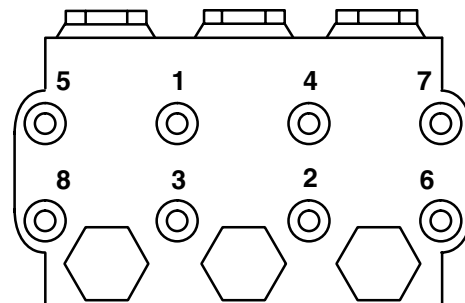
Order Plunger Repair Kit 245619. It includes replacement retainers, o-rings, washers, and backup rings for three cylinders.

1. Turn plunger retaining nut 5 or 6 turns using a 13 mm wrench to loosen. Push plunger toward crankcase to separate plunger and retaining screw.

2. Remove nut from plunger and examine o-ring, backup ring, and copper bearing/gasket washer. Replace these parts if necessary.
3. Remove plunger and flinger from plunger shaft. Clean and replace parts as necessary.
4. Inspect plunger shaft for oil leakage from crankcase. If leaking is obvious, replace oil seals. Otherwise, **DO NOT** remove these seals, because they cannot be reused. Order Oil Seal Kits 245604 for replacing the seals.
5. Lightly grease the flinger (and oil seal if it is being replaced), and replace on plunger shaft. Then install plunger.
6. Lightly grease retaining screw and outer end of plunger. Place washer, o-ring, and backup ring around screw, and install nut through plunger. Torque to 14.4 ft-lb (19.5 N•m).

NOTE: If replacing packings, see Servicing V-packings, page 11.

7. Lubricate outside of each plunger. Slide the manifold onto the crankcase, being careful not to damage seals.
8. Install cap screws and washers finger tight. Torque screws to 22 ft-lb (30 N•m) following tightening pattern (Fig. 2). Uneven tightening could cause manifold to bind or jam.



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Fig. 2

Servicing V-Packings

NOTE: There are two types of packing kits: One is packings only. The other includes packings, o-rings and retainers.

1. Remove the manifold as outlined in Pumping Section on page 10.
2. Carefully pull packing retainer from manifold. Examine o-ring and replace if cut or damaged.
3. Remove v-packing and head ring. Pull out intermediate retainer ring. Remove second v-packing and second head ring.
4. Inspect all parts. Replace as necessary.

5. Thoroughly clean packing cavities. Examine for debris or damage.
6. Lightly grease packing cavities. Replace packings in the following order: head ring, v-packing, intermediate ring, head ring, v-packing, packing retainer. Install o-ring in retainer groove.

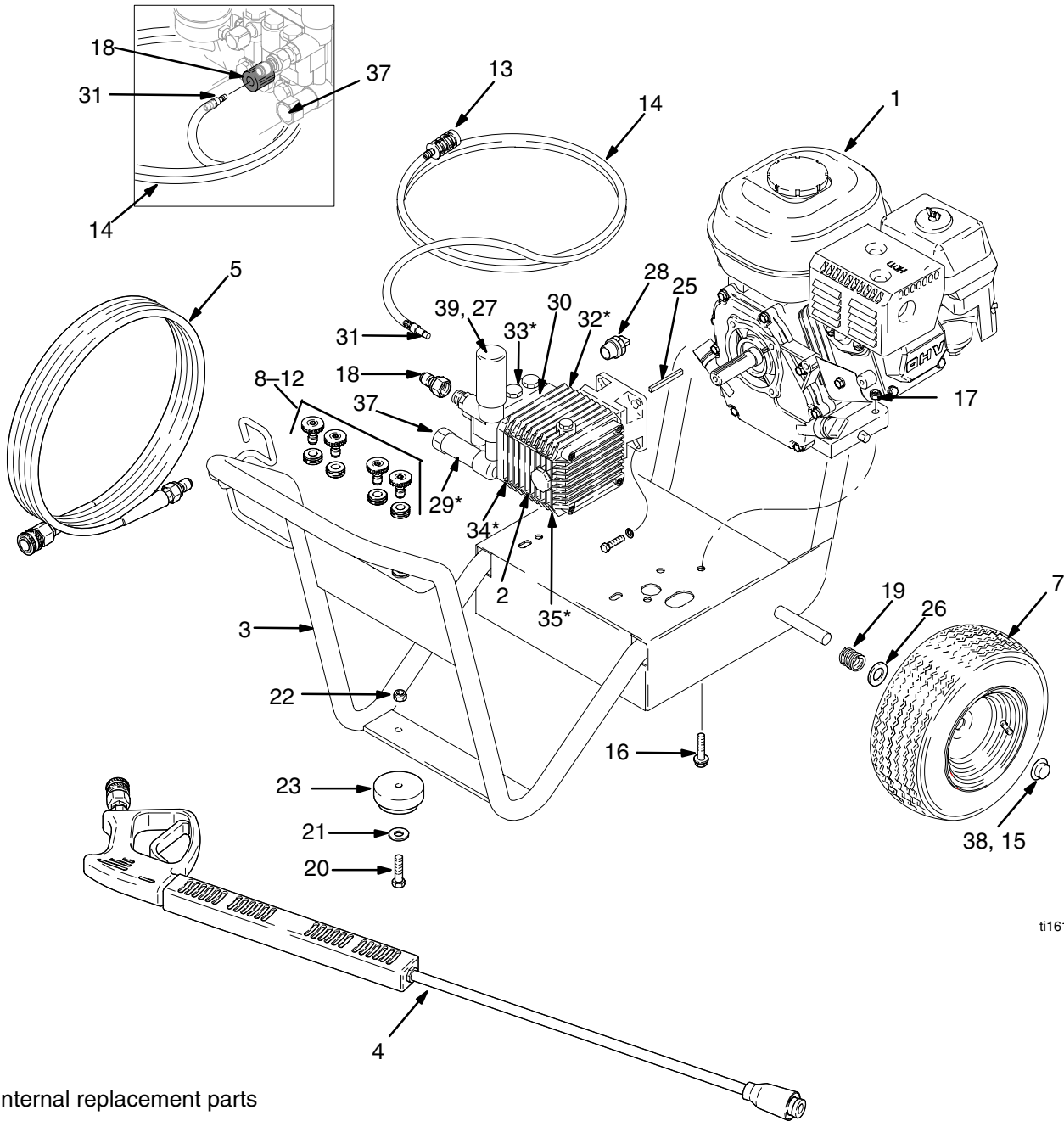
CAUTION

Install parts in proper order and facing proper direction. Improperly installed parts will cause a malfunction.

7. Reassemble manifold as instructed in Servicing Plungers on page 10.

Parts: APS2730H

Model Nos. 246798 Series A, with Honda 6.5 HP Motor



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*internal replacement parts

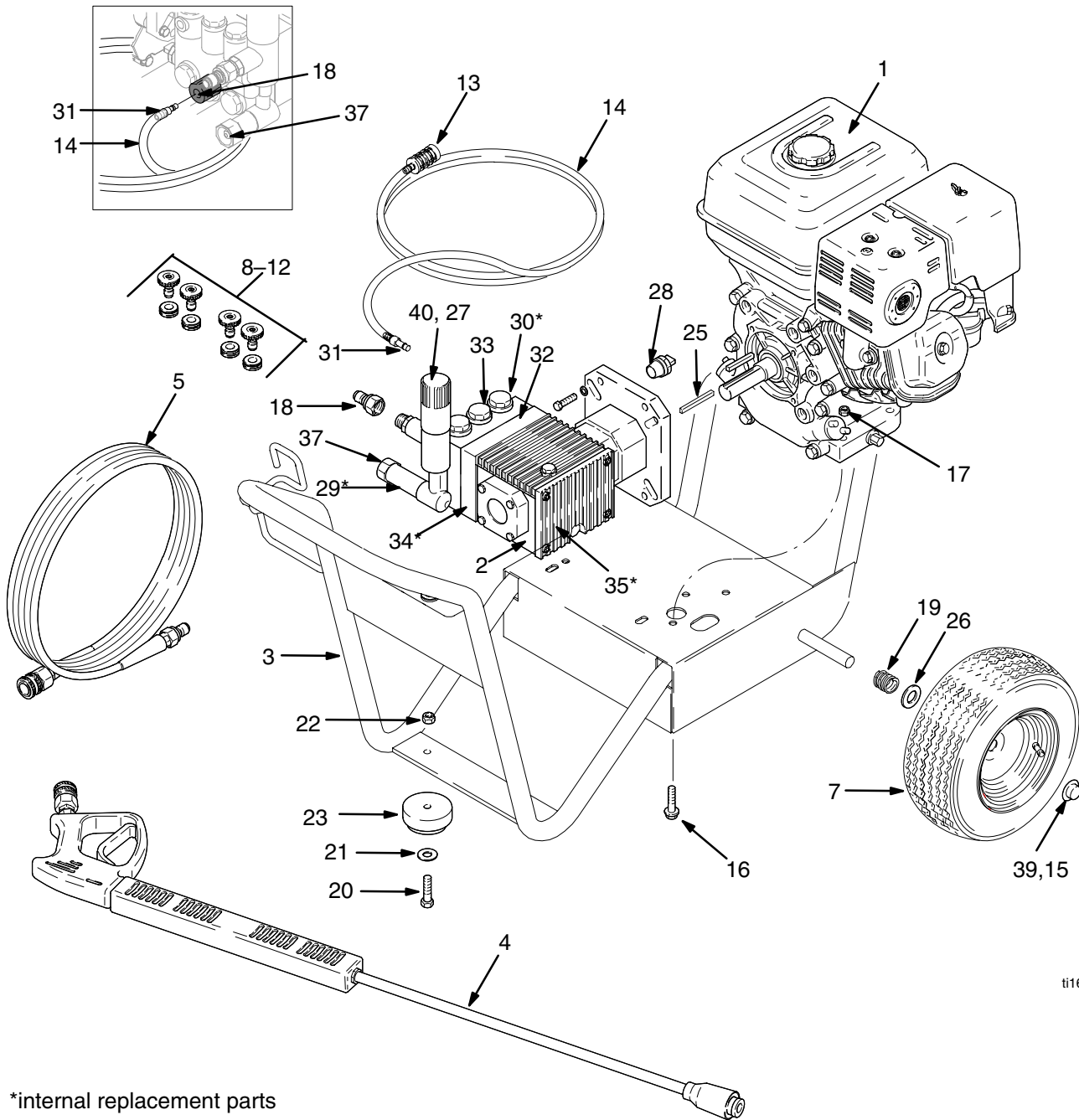
Parts: APS2730H

Model Nos. 246798, Series A with Honda 6.5 HP Motor

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	15A405	ENGINE, gasoline 6.5 HP Honda	1	19	15A401	SPRING, compression	2
2	245585	PUMP, water 2700, complete	1	20	15A402	SCREW, cap	2
3	245422	KIT, frame, includes wheels, feet and tip grom- mets		21	15A483	WASHER, flat	2
4	245582	GUN assembly	1	22	15A484	NUT, lock	2
5	245587	HOSE	1	23	15A495	FOOT, rubber	2
7	15A406	WHEEL, pneumatic	2	24	15A485	VALVE, thermal 3/8 NPT	1
8	15A407	TIP, spray	1	25	15A492	KEY, square	1
9	15A408	TIP, spray	1	26	15A487	WASHER, nylon	2
11	15A409	TIP, spray	1	27	245601	KIT, unloader, preset, 2700	1
	245586	KIT, tip 4-pack	1	28	15A485	VALVE, thermal	1
12	15A394	TIP, spray, chemical	1	29	245599	KIT, repair, chemical injector	1
13	15A395	STRAINER	1	30	15A488	MANIFOLD, pump, replacement	1
14	15A396	TUBING, chemical, 1/4-in ID X 8 ft	1	31	15A489	COUPLING, chemical injector	1
15	15A397	CAP, end	2	32	245605	KIT, pump, packing (3 cylinders)	1
16	15A398	SCREW	4	33	245606	KIT, pump, valve (3 cylinders)	1
17	15A399	NUT, nylock	4	34	15A494	KIT, pump, plunger (set of 3)	1
18	15A400	COUPLING, quick release	1	35	245604	KIT, pump, oil seal	1
				37	245600	FITTING, pump, inlet	1
				38	15A491	NUT, push on (not shown)	2
				39	245603	CHEMICAL injector com- plete	1

Parts: APS3030H

Model Nos. 246799, Series A with Honda 9 HP Motor



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Parts: APS3030H

Model Nos. 246799, Series A with Honda 9 HP Motor

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	15A389	ENGINE, GX270	1	21	15A483	WASHER, flat	2
2	245580	PUMP, water 3000	1	22	15A484	NUT, lock	2
3	245422	KIT, frame, includes wheels, feet, and tip grommets		23	15A495	FOOT, rubber	2
4	245582	GUN assembly	1	25	15A493	KEY, square	1
5	245587	HOSE, 3000	1	26	15A487	WASHER, nylon	2
7	15A390	WHEEL, pneumatic	2	27	245602	KIT, repair, unloader, preset 3000	1
8	15A391	TIP, spray	1	28	15A486	VALVE, thermal	1
9	15A392	TIP, spray	1	29	245599	KIT, repair, chemical injector (internal parts only)	1
11	15A393	TIP, spray	1	30	15A490	MANIFOLD, pump, replacement	1
	245584	KIT, tip 4-pack	1	31	15A489	COUPLING, chemical injector	1
12	15A394	TIP, spray, chemical	1	32	245607	KIT, pump, packing (3 cylinders)	1
13	15A395	STRAINER	1	33	245606	KIT, pump, valve (3 cylinders)	1
14	15A396	TUBING, chemical, 1/4-in ID X 8 ft	1	34	245608	KIT, pump, plunger (set of 3)	1
15	15A397	CAP, end	2	35	245604	KIT, pump, oil seal	1
16	15A398	SCREW	4	37	245600	FITTING, pump, inlet	1
17	15A399	NUT	4	39	15A491	NUT, push on (not shown)	2
18	15A400	COUPLING, quick release	1	40	245603	CHEMICAL, injector complete	1
19	15A401	SPRING, compression	2				
20	15A402	SCREW, cap	2				

ASM Standard Warranty

ASM warrants all equipment referenced in this document which is manufactured by ASM and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized ASM distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by ASM, ASM will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by ASM to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with ASM's written recommendations.

This warranty does not cover, and ASM shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-ASM component parts. Nor shall ASM be liable for malfunction, damage or wear caused by the incompatibility of ASM equipment with structures, accessories, equipment or materials not supplied by ASM, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by ASM.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized ASM distributor for verification of the claimed defect. If the claimed defect is verified, ASM will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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ASM's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

ASM MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY ASM. These items sold, but not manufactured by ASM (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. ASM will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

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