HP18264

Hydraulic Power Unit

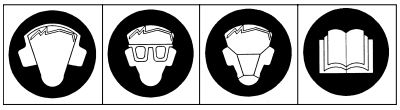
Safety, Operation and Routine Maintenance

User's Manual

⚠ DANGER

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.



STANLEY®

CE

OPS/MAINT USA & CE VERSION
43537 08/2001 Ver 2

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SAFETY FIRST

It is the responsibility of the operator
and service technician to read rules and
instructions for safe and proper
operation and maintenance.

A cautious worker
using common sense
is the greatest safety device

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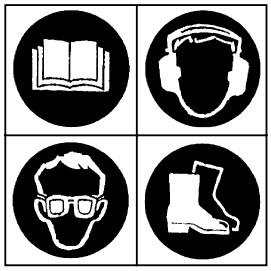
⚠ DANGER

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS EQUIPMENT.

REPAIRS AND / OR SERVICE TO THIS EQUIPMENT MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

For the nearest authorized and certified dealer, call Stanley Hydraulic Tools at one of the locations listed on the back of this manual.

SAFETY PRECAUTIONS



⚠ DANGER

Do not operate this equipment or associated equipment until the following safety instructions have been thoroughly read and understood! Read this manual before installing, operating or maintaining this equipment.

Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the equipment.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 5.

In addition to this manual, read and understand safety and operating instructions in the Engine Operation Manual furnished with the power unit.

GENERAL SAFETY PRECAUTIONS

The HP1 Compact Hydraulic Power Unit will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the Power Unit. Failure to do so could result in personal injury or equipment damage.

- Operators must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Establish a training program for all operators to ensure safe operation.
- Do not operate the power unit unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear and head protection, and safety shoes at all times when operating the power unit and a hydraulic tool.
- Do not inspect or clean the power unit while the unit is running.
- Always use hoses and fittings rated at 2500 psi/172 bar with a 4 to 1 safety factor. Be sure all hose connections are tight.
- Make sure all hoses are connected for correct flow direction to and from the tool being used.
- Do not inspect hoses and fittings for leaks by using bare hands. "Pin-hole" leaks can penetrate the skin.
- **Never operate the power unit in a closed space.** Inhalation of engine exhaust can be fatal.
- Do not operate a damaged or improperly adjusted power unit.
- Never wear loose clothing that can get entangled in the working parts of the power unit.
- Keep all parts of your body away from the working parts of the power unit.

• Always wear appropriate safety equipment such as goggles, ear protection, and toe guards. Certain tools used in conjunction with the power unit may require other safety equipment such as breathing filters.

• Keep clear of hot engine exhaust.

• Do not add fuel to the power unit while the power unit is running or is still hot.

• Do not operate the power unit if gasoline odor is present.

• Do not use flammable solvents around the power unit engine.

• Do not operate the power unit within 3.3 ft/1 m of buildings, obstructions, or flammable objects.

• Do not reverse grinding wheel rotation direction by changing fluid flow direction.

• Allow the engine to cool before storing the power unit in an enclosure.

• To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

SAFETY SYMBOLS

Safety symbols are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.

DANGER

This safety symbol may appear on the tool. It is used to alert the operator of an action that could place him/her or others in a life threatening situation.

⚠ WARNING

This safety symbol appears in these instructions to identify an action that could cause bodily injury to the operator or other personnel.

IMPORTANT

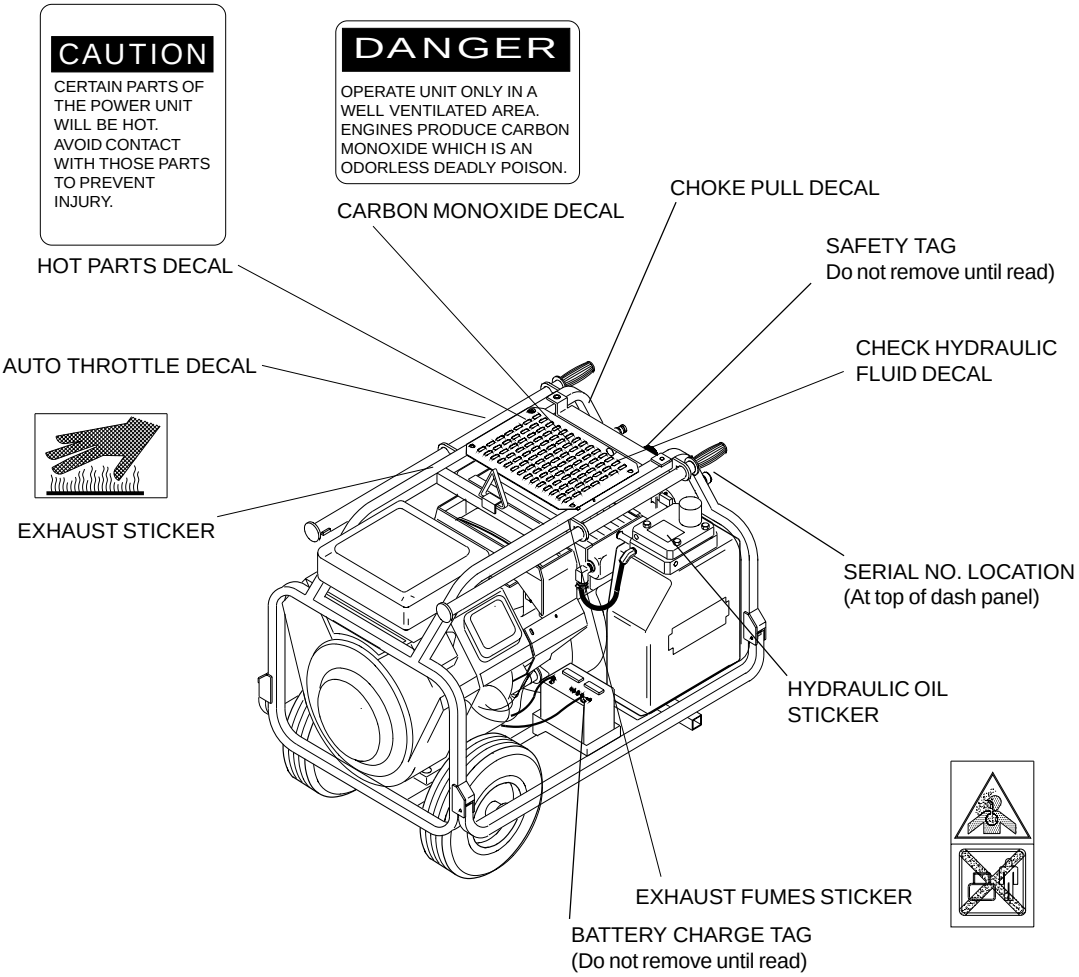
This safety symbol appears in these instructions to identify an action or condition that could result in damage to the tool or other equipment.

Always observe safety symbols. They are included for your safety and for the protection of the tool.

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

SAFETY STICKERS & TAGS



The safety tag at right is attached to the power unit when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.

DANGER

1. FAILURE TO USE HYDRAULIC HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.

   BEFORE USING HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS **MAINTAINED AS NON-CONDUCTIVE**. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.

2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.

   A **DO NOT** EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.

   B **DO NOT** EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.

   C CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT** FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

15875

DANGER

D DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED TO TOOL "IN" PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "OUT" PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY.

4. DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.

5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.

6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.

7. TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

15875

SAFETY TAG (shown smaller then actual size)

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

Hydraulic hose types authorized for use with Stanley Hydraulic Tools are as follows:

1. Certified non-conductive
2. Wire-braided (conductive)
3. Fabric-braided (not certified or labeled non-conductive)

Hose 1 listed above is the only hose authorized for use near electrical conductors.

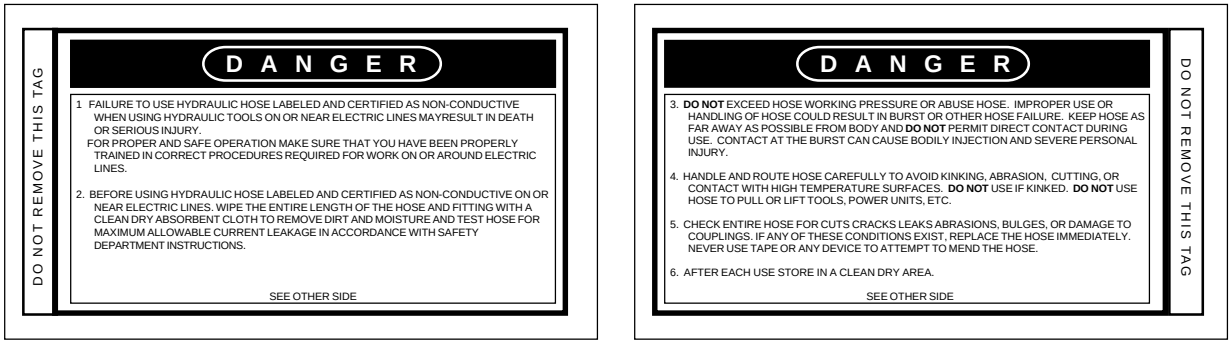
Hoses 2 and 3 listed above are **conductive** and **must never** be used near electrical conductors.

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley. DO NOT REMOVE THESE TAGS.

If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained at no charge from your Stanley Distributor.

1 CERTIFIED NON-CONDUCTIVE HOSE

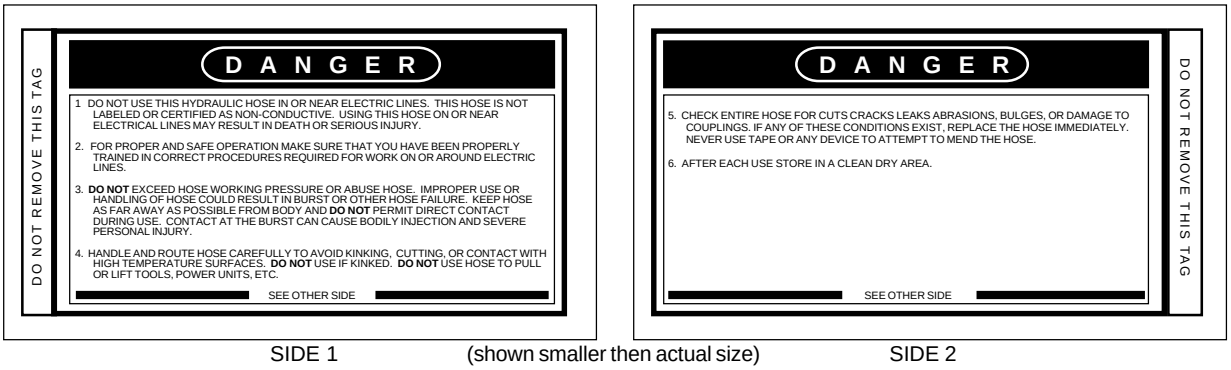
This tag is attached to all certified **non-conductive** hose.



SIDE 1 (shown smaller then actual size) SIDE 2

2 AND 3 WIRE-BRAIDED AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE) HOSE

This tag is attached to all **conductive** hose.



SIDE 1 (shown smaller then actual size) SIDE 2

HOSE PRESSURE RATING

The rated working pressure of the hydraulic hose **must be equal or higher than** the relief valve setting on the hydraulic system.

OPERATING INSTRUCTIONS

PREPARATION FOR USE

Do not operate the power unit until you have read the *engine* operating and maintenance instructions manual furnished with the unit.

1. ENGINE CRANKCASE OIL LEVEL

IMPORTANT

Do not start the engine with the throttle control set at 5 or 8 gpm. The pin should be in the "AUTO" position for starting.

Always check the oil level before starting the engine. Make sure the oil level is at the FULL MARK on the dipstick. Do not overfill. Use detergent oil classified "For Service SE, SF, SG" as specified in the engine operating and maintenance manual.

2. ENGINE FUEL LEVEL

Check the fuel level. If low, fill with un-leaded gasoline with a minimum of 85 octane.

3. HYDRAULIC FLUID

Check the sight pipe in the hydraulic fluid reservoir for the proper fiuid level. Proper fluid level is indicated when the center section of the sight pipe is dark. If the center section of the sight pipe is not dark, add hydraulic fluid. Use fluids meeting the following specifications.

Viscosity (Fluid Thickness)

U.S.	METRIC
50°F 450 SSU Maximum	10°C 95 C.S.
100°F 130-200 SSU	38°C 27-42 C.S.
140°F 85 SSU Minimum	60°C 16.5 C.S. Minimum

Pour Point -10°F/-23°C Minimum (for cold startup)

Viscosity Index (ASTM D-2220) 140 Minimum

Demulsibility (ASTM D-1401) 30 Minutes Maximum

Flash Point (ASTM D-92) 340°F/171°C Minimum

Rust Inhibition (ASTM D-665 A & B) Pass

Oxidation (ASTM D-943) 1000 Hours Minimum

Pump Wear Test (ASTM D-2882) 60 mg Maximum

The following fluids work well over a wide temperature range, allow moisture to settle out and resist biological growth that may occur in cool operating hydraulic circuits. These fluids are recommended by Stanley. Other fluids that meet or exceed the specifications of these fluids may also be used.

Chevron AW-MV-32

Exxon "Univis" J-26

Mobil D.T.E. 13

Gulf "Harmony" AW-HVI-150-32

Shell "Tellus" T-32

Texaco "Rando" HD-AZ

Union "Unax" AW-WR-32

Terresolve EnviroLogic 132

4. HYDRAULIC CONNECTIONS

Facing the panel control valve, the far right-hand male quick disconnect fitting is the pressure (FLUID OUT) fitting. The left-hand female quick disconnect fitting is the return (FLUID IN) fitting.

The recommended hose length is 25 ft/8 m with a 1/2 inch/12.7 mm inside diameter. The hoses must have a working pressure rating of at least 2500 psi/175 bar. Each hose end must have male thread ends compatible with H.T.M.A. (HYDRAULIC TOOL MANUFACTURERS ASSOCIATION)

5. BATTERY

The supplied 12 Volt DC battery is fully charged.

Make sure the battery cables are tight and charging circuit functions are operating properly.

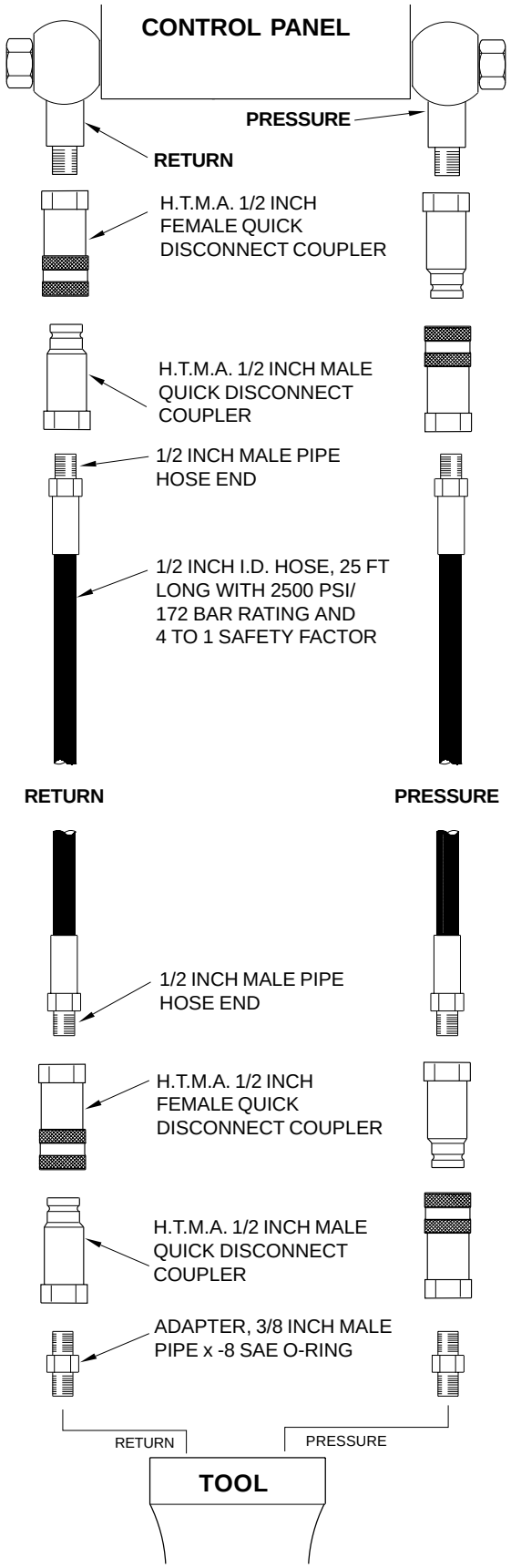


Figure 1. Hydraulic Connections

quick disconnect fittings (NPT type threads). (See Figure 1.)

Longer hoses may be used when necessary, but can effect the operation of the engine automatic throttle due to fluid resistance in the hose. If small diameter or long hoses are used, or if restrictive fittings are connected to the supply and return ports, the pressure required to push the fluid through the system and back to the hydraulic tank will be higher. If the pressure is too high, this will cause the engine RPM to remain at full load if "AUTO" is selected on the automatic throttle. Also see "HYDRAULIC HOSE REQUIREMENTS" earlier in this manual.

QUICK DISCONNECT COUPLERS

H.T.M.A. approved quick disconnect couplings are installed to hydraulic hoses so that the direction of oil flow is always from the male to the female quick disconnect as shown in figure 1. Quick disconnect couplings and hose fittings are selected so that additional fittings such as reducer or adapter fittings are not required.

If adapter fittings are used, they must be approved steel hydraulic fittings meeting a minimum operating pressure rating of 2500 psi/172 bar. Do not use galvanized pipe fittings or black pipe fittings.

Use thread tape or pipe joint compound when installing quick disconnect couplings to hose or tool fittings. Follow the instructions furnished with the selected thread sealant. DO NOT OVERTIGHTEN THE FITTINGS.

CAUTION

Do not charge the battery with a standard automotive battery charger. This type of charger produces a charging amperage higher than 2 amps. Charging the battery with amperage higher than 2 amps will damage the battery.

6. THROTTLE CONTROL (See Figure 2)

The throttle control permits the operator to select one of 3 operating modes after the engine has warmed up. For startup, the throttle control should be set on "AUTO".

a. **AUTO** - Engine speed varies with hydraulic circuit pressure to maintain a constant 8 gpm. When a tool is not being used the engine will return to idle automatically.

b. **5** - Engine speed is held at part throttle to maintain 5 gpm. When a tool is not being used the engine will not return to idle until the faspin is removed.

Typical conditions requiring the "5" position are:

• When operating small drills, impact wrenches, certain chain saws, or a small chipping hammer where fluid flows of less than 5 gpm are desirable for slower tool speeds. **NOTE: Many tools are designed only to operate at 8 gpm.**

c. **8** - Engine speed is held at full throttle to maintain 8 gpm. When a tool is not being used the engine will not return to idle until the faspin is removed.

Typical conditions requiring the "8" position are:

• When operating drills or grinders or diamond saws, tool rpm must be maintained even when load requirements are light.

• When operating an alternator, fluid flow must be constant to produce the required voltage and frequency, even when load requirements are light.

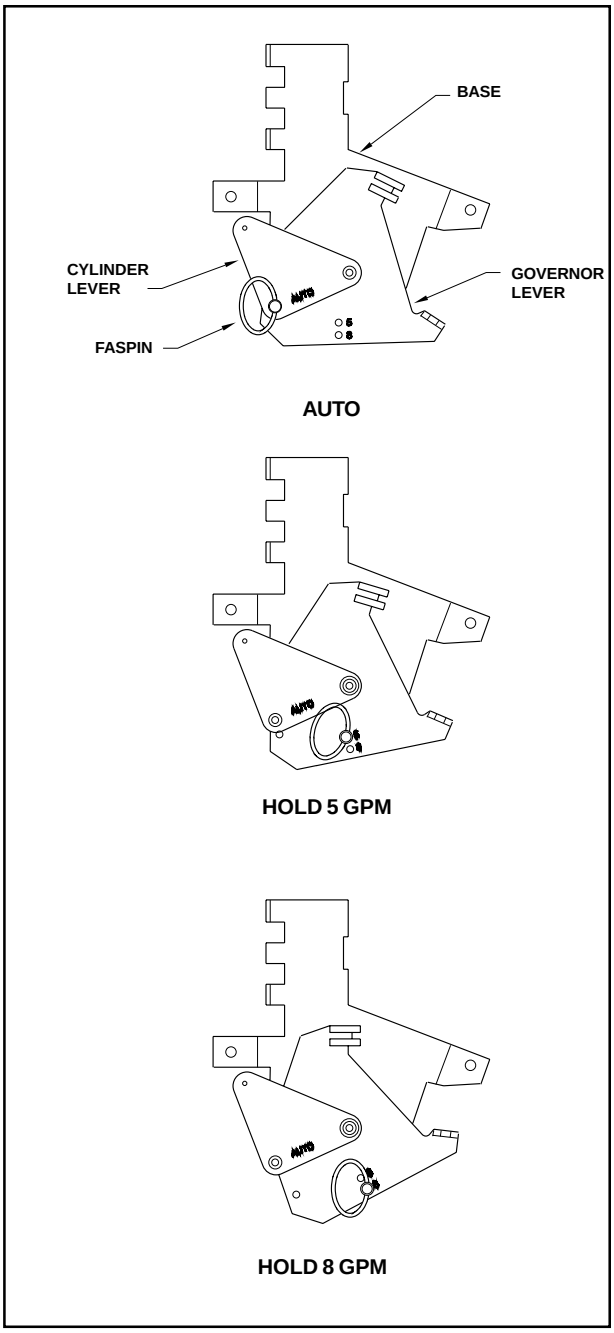


Figure 2. Throttle Control Settings

STARTUP - See "PANEL CONTROLS" - Figure 3

1. Assure the circuit control lever is in the "TOOL OFF" position.

2. Select the "AUTO" throttle operating mode by positioning the governor lever to the cylinder lever and inserting the faspin as shown in figure 2.

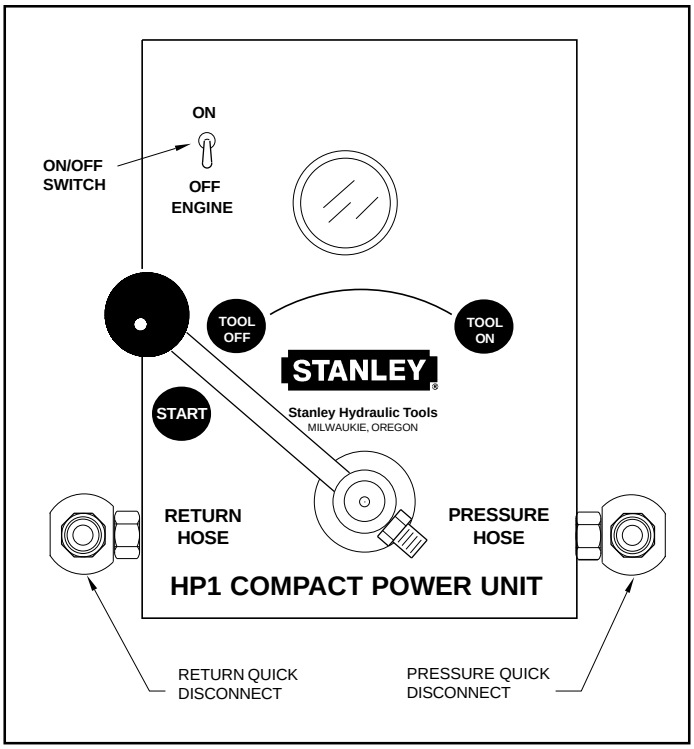


Figure 3. Control Panel

3. Position the ON/OFF switch to the "ON" position.

4. Pull the choke lever out.

5. Push the circuit control lever to the "START" position.

6. After the engine starts, allow the engine to warm up until it runs smoothly with the choke released.

IMPORTANT

Do not start the engine with the throttle control set at 5 or 8 gpm. The pin should be in the "AUTO" position for starting.

COLD WEATHER STARTUP

1. Use the procedures described under "STARTUP" and then follow the procedure below.

2. Hydraulic fluids are thicker in cold weather. Therefore, it is recommended that the engine be run at low idle long enough to bring the fluid temperature up to a minimum of 50°F/10°C or until the hose fitting between the cooler and hydraulic oil reservoir is warm.

3. If the tools and tool hoses are cold, it is recommended to allow hydraulic fluid to circulate through the tool hoses until warm before using the tool.

TOOL OPERATION

1. With the engine running smoothly, move the control lever to the "ON" position.

2. Activate the tool. The automatic throttle will increase engine speed to permit proper tool operation. When the tool is deactivated, the automatic throttle allows the engine to return to idle.

3. If automatic throttle operation is not desired, change the throttle control to "5 or 8".

SHUTDOWN

1. Place the circuit control lever in the "OFF" position.

2. If the throttle control is in the "5" or "8" position, change it to the "AUTO" position.

3. Allow the engine to idle for approximately one minute and then switch the ON/OFF switch to the "OFF" position.

ROUTINE MAINTENANCE

ENGINE MAINTENANCE

Follow the maintenance schedule and general maintenance instructions in the engine maintenance and operation manual furnished with the power unit. Normal maintenance includes:

- Service foam air pre-cleaner every 25 hours of operation.
- Service air paper cartridge every 100 hours of operation.
- Replace in-line fuel filter every 100-300 hours or sooner if required.
- Replace spark plugs every 100 hours of operation.
- Change engine oil after first 5 hours of operation, then after every 50 hours of operation. If engine has been operating under heavy load or in high ambient temperature, change the oil every 25 hours of operation.
- Change oil filter when engine oil is changed.
- Check oil level daily.
- Remove dirt and debris from engine with a cloth or brush daily. Do not use water spray.
- Clean air cooling system every 100 hours of operation.

HYDRAULIC SYSTEM MAINTENANCE

- Check hydraulic fluid level daily. The center of the sight pipe on the reservoir must be dark. If it is not dark, fluid must be added. Add fluid per specifications in this manual. (See "HYDRAULIC FLUID" under the section titled "OPERATING INSTRUCTIONS".

- Remove condensed moisture from the hydraulic fluid by pumping the hydraulic fluid into a 5 gal / 20 l container through the pressure hose. Make sure the engine is at idle when performing this procedure. When the hydraulic reservoir is empty turn the engine off immediately.

- Allow the fluid to sit long enough for the water to settle to the bottom of the container. Slowly pour the fluid back into the hydraulic tank, avoiding the water at the bottom of the container.
- Each day, check hydraulic lines and fittings for leaks, kinks, etc. Do not use your hand to perform this check.
- Change the hydraulic filter element every 200 hours of operation. Change more often if cold, moist or dusty conditions exist.
- Check oil cooler for debris. Remove debris with air pressure.

STORAGE

- Clean the unit thoroughly before storage. Do not use water pressure.
- Always store the unit in a clean and dry facility.
- If the unit will be stored for a prolonged period (over 30 days), add a fuel additive to the fuel tank to prevent the fuel from gumming. Run engine for a short period to circulate the additive.
- Replace crankcase oil with new oil.
- Remove spark plugs and pour approximately 1 ounce (30 ml) of engine oil into each cylinder. Replace spark plugs and crank the engine slowly to distribute the oil.
- Check hydraulic reservoir for water. If water is found, change the oil and circulate it through the tool hose and tool. (See "HYDRAULIC SYSTEM MAINTENANCE" earlier in this section).
- Disconnect tool hoses.

TROUBLE SHOOTING CHART

PROBLEM	CAUSE	REMEDY
Engine will not run.	Ignition switch off.	Set the switch to "ON" before pushing control lever to the left.
	Battery not connected.	Attach battery cables, check wires.
	Weak battery.	Test battery, charge or replace.
	No fuel.	Add Fuel.
	Fuel filter plugged.	Replace fuel filter.
	Defective spark plugs.	Remove plugs, check gap, clean or replace.
Fluid blowing out of fluid reservoir vent.	Defective pump seal.	Replace pump seal.
	Hydraulic tank overfilled.	Correct the fluid level.
Hydraulic tool won't operate.	Control lever setting incorrect.	Set control lever to "TOOL ON".
	Incorrect hose connection to tool.	Make sure the tool hose circuit goes from right (pressure) fitting to tool and back to the left fitting (return). Fluid always flows from the male to female fittings.
	Quick disconnect fittings defective.	Detach from hose, connect set together and check for free flow.
	Hydraulic fluid level low.	Check for correct fluid level. Fill using the recommended fluid.
	Pump coupling defective.	Check power unit between pump and cooler. The coupler should slide only .150 inches between blower and pump.
	Relief valve stuck open.	Adjust or replace valve.
	Suction hose kinked.	Make sure suction hose from fluid reservoir to pump inlet has a smooth curve.
	Automatic throttle not working	If tool operates at low engine rpm, set throttle control manually, to 5 or 8 (per tool rating). Later, have the throttle control serviced.

SPECIFICATIONS

Engine: ..... 20 hp Honda

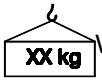
Engine Lube System: ..... Pressure Lube

Capacity ..... 8 gpm @ 2500 psi / 30 lpm @ 172 bar

Length: ..... 35 in. / 89 cm

Width: ..... 23.5 in: / 60 cm

Height: ..... 29.5 in. / 75 cm



Weight (Wet): ..... 332 lbs / 151 kg

Fuel Tank Capacity: ..... 4.2 gal. / 15 ltr

Estimated Gas Consumption Per Hour ..... 1.3 gal / 4 ltr

Hydraulic Reservor Capacity: ..... 2.7 gal. / 11 ltr

Relief Valve "crack" setting ..... 2150 psi / 148 bar

Full relief setting ..... 2500 psi / 172 bar

EHTMA Category ..... "D" (30 lpm @ 138 bar)

Noise Level ..... 93.4 dBA

Vibration Level ..... N/A

HP18264 POWER UNIT PARTS LIST

Item No	P/N	Qty	Description
			FIG. 1 - ENGINE ASSY
1	36918	1	Engine, Honda 20 hp
2	40458	1	Oil Filter
3	00899	7	Capscrew
4	37222	1	Exhaust Shield
5	38577	1	Exhaust Kit
6	43658	1	Shield
7	-----	--	Capscrew (Incld with exhaust kit)
8	03906	2	Nut
9	12175	6	Washer
10	23788	4	Spacer
11	03877	3	Capscrew
12	03031	5	Lock Washer
13	04637	2	Capscrew
14	08668	12	Sheet Metal Screw
15	39721	1	Choke Cable Assy
16	40078	1	Oil Cooler
17	43572	1	Decal, Auto Throttle
18	40056	1	Cooler Mount Weldment
19	31242	4	Locknut, 7/16-14
20	31765	1	Oil Pressure Switch (used prior to Aug 2001)
	16312	1	Oil Pressure Switch (used after Jul 2001)
21	07783	1	Blower Housing
22	05694	4	Washer, 7/16 in.
23	23778	4	Standoff
24	40053	1	Cooler Mount
25	01298	3	Lock Washer
26	07818	1	Key
27	22674	2	Set Screw
28	07819	1	Key
29	23719	1	Coupling Assy (incld set screws, item 30 & 31 in fig. 2)
30	08667	5	Capscrew
31	07809	1	Inlet Ring
32	08669	1	Inlet Ring Gasket
33	08035	1	Blower Wheel
34	23781	1	Blower Hub & Shaft Extension
35	37237	1	Adaptor
	40459	1	Engine Air Filter (NOT SHOWN)
	40453	1	Foam Engine Air Filter (NOT SHOWN)
	40460	1	Fuel Filter (NOT SHOWN)
36	43532	1	Bracket
			FIG. 2 FRAME ASSEMBLY
1	31241	5	Buttonhead Screw, 5/16 in.-18, slotted pan head
2	23401	1	Fuel Tank
3	07810	1	Fuel Tank Cap
4	21688	1	Tank Support
5	04416	2	Capscrew, 5/16 in.-18 x 1/2
6	23774	1	Actuator Assy (See Fig. 4)
7	00719	3	Nut
8	00035	1	Flathead Capscrew, 1/4 in.-20 x 1-1/4
9	04539	10	Washer, 1/4 in.
10	03907	8	Capscrew, 1/4 in.-20 x 1-1/2
11	27759	2	Top Grille
12	08080	2	Handle Grip
13	23775	1	Dash Panel Assy (See Fig. 5)
14	02072	2	Capscrew, 5/16 in.-18 x 3/4
15	00331	2	Lockwasher
16	12175	4	Flatwasher, 5/16 in.
17	08201	2	Flathead Capscrew, 5/16 in.-18 x 1-1/2
18	16251	2	Screw, 1/4-20 x 2-1/2
19	27931	2	Capscrew
20	07757	1	Inlet Tube Assy
21	05967	1	Inlet Flange
22	08045	1	Hose Clamp
23	-----	1	Key (Incld with item 26)
24	07860	2	Capscrew, 3/8 in.-16 x 1-1/4
25	01459	2	Lockwasher, 3/8 in.
26	04134	1	Hydraulic Pump
27	-----	1	Retaining Ring (Incld with item 30)
28	27653	1	Hydraulic Tank Assy (See Fig. 6)
29	-----	1	Washer, (Incld with item 30)
30	23719	1	Coupling Assy (Incld item 31)
31	-----	1	Coupling Sleeve (Incld with item 30)
32	37242	2	Spacer
33	07758	1	Tank Support Tab
34	04303	1	Battery
	39444	1	Battery Box with Strap (NOT SHOWN)
35	00429	2	Nut
36	03031	2	Lockwasher, 5/16
37	14903	2	Capscrew
38	05227	2	Carriage Bolt, 5/16 in. x 3/4
39	31240	2	Retaining Ring
40	21318	2	Washer
41	16310	2	Wheel
42	-----	--	Rectifier (Furnished with Engine)
43	03906	4	Nut, ESNA, 5/16 in.-18
44	31699	2	Lift Handle
45	370504	2	Capscrew, 5/16 in.-18 x 2-3/4
46	370513	4	Capscrew, 5/16 in.-18 x 1-3/4
47	37233	1	Frame Weldment
48	16363	2	Axle
49	28093	2	Handle
50	23720	1	Throttle Cable
51	07764	1	Choke Pull Decal
52	28985	1	Exhaust Sticker
53	28988	1	Exhaust Fumes Sticker
54	28089	1	Decal, Hot Parts
55	28046	1	Decal, Carbon Dixoide
56	28088	1	Decal, Check Hydraulic Fluid
57	29133	1	Decal, California Prop. 65
58	39280	1	Ball Hitch
59	38364	1	Bracket
60	19212	1	Capscrew
61	06971	1	Nut
62	-----	--	NO ITEM
63	25300	1	Washer
			FIG. 3 ACTUATOR ASSY
1	04913	1	Cable Stop
2	23717	1	Cylinder Pull Wire
3	-----	1	Screw (incld with item 1)
4	15161	1	Gland Cap
5	06891	1	O-ring
6	02838	2	Back-up Ring
7	23370	1	O-ring
8	15160	1	Keeper
9	20550	1	Spring
10	15148	1	Piston
11	360009	1	Hose Assy
12	15158	1	Cylinder
13	05931	1	Hose Clamp
14	23785	1	Base Weldment
15	23784	1	Control Weldment
16	23783	1	Cylinder Lever Weldment
17	04539	1	Washer, 1/4 in.
18	15162	1	Fast Pin
19	00769	1	Capscrew, 1/4 in.-20 x 3/4
			FIG. 4 DASH PANEL & VALVE ASSY
1	25633	1	Swivel Fitting
2	24061	1	Male Coupler Body - 1/2 in.
3	24237	1	Panel Weldment Assy (incld item 12)
4	20606	1	Hour Meter
5	07760	1	Spool Washer
6	07820	1	Retaining Ring
7	00147	1	Nut
8	05849	1	Control Rod
9	02633	1	Knob
10	-----	1	Incld with item 14
11	-----	1	Incld with item 14
12	07766	1	Decal
13	24060	1	Female Coupler Body - 1/2 in.
14	07808	1	ON/OFF Switch (6 pole - used prior to Aug 2001)
	49053	1	ON/OFF Switch (9 pole - used after Jul 2001)
15	34655	1	45° Elbow
16	00140	1	Quad Ring
17	01212	2	Pipe Plug
18	07968	1	Starter Switch
19	00899	2	Capscrew

Item No	P/N	Qty	Description
20	01298	2	Lock Washer
21	-----	--	NO ITEM
22	01539	1	Elbow Fitting
23	07745	1	Stop Washer
24	05551	1	Capscrew
25	01459	1	Lock Washer
26	07753	1	Bar
27	07771	1	Valve Spool
28	06988	1	Backup Ring
29	06989	1	O-ring
30	07781	1	Valve Block
31	05043	1	Relief Valve
32	00955	1	Pipe Plug
33	04868	1	Elbow Hose Barb
34	-----	1	Incld with item 4
35	-----	2	Incld with item 4
36	-----	1	Incld with item 4
37	07794	1	Backup Ring
38	01403	1	O-ring
39	00283	2	Washer
40	-----	2	Nut (Incld w/item 18)
			FIG. 5 TANK ASSY
1	21323	1	Filler/Breather Cap
2	08253	4	Capscrew, 1/4 in.-20 x 1-1/2
3	01271	1	Pipe Plug
4	27652	1	Filter Block
5	27654	1	Pipe Nipple
6	21326	1	Spin-on Filter Head
7	350219	1	Reducer
8	07821	1	Elbow
9	25417	1	Filter, Zinga AE-25
10	07784	1	Hydraulic Tank
11	07748	1	Sight Pipe
12	05535	1	Breather
13	09591	1	Filter Grip Plate
14	09590	1	Gasket
15	27655	1	Oil Tube
16	35686	1	Decal, Hydraulic Fluid
17	39718	6	Screw, Pan Head
18	02487	1	Flathead Capscrew
			FIG. 6 HOSES, FITTINGS, and CLAMPS
1	07821	1	90 Degree Elbow
2	04889	4	Hose Clamp
3	04875	1	Hose
4	34654	1	Hose
5	360009	1	Hose
6	04321	1	90 Degree Elbow
7	08045	2	Hose Clamp
8	04306	1	Hose
9	11179	2	Hose Clamp
10	07747	1	Suction Sleeve
11	07749	1	Suction Tube
12	02395	8	Wire Tie
13	23779	1	Hose Clamp
14	04308	1	Hose
15	-----	--	NO ITEM
16	04317	2	Clamp
	40460	1	Fuel Filter (NOT SHOWN)
17	39717	1	45° Elbow

NOTE: Use Figure Number and Item Number when ordering.

NOTES

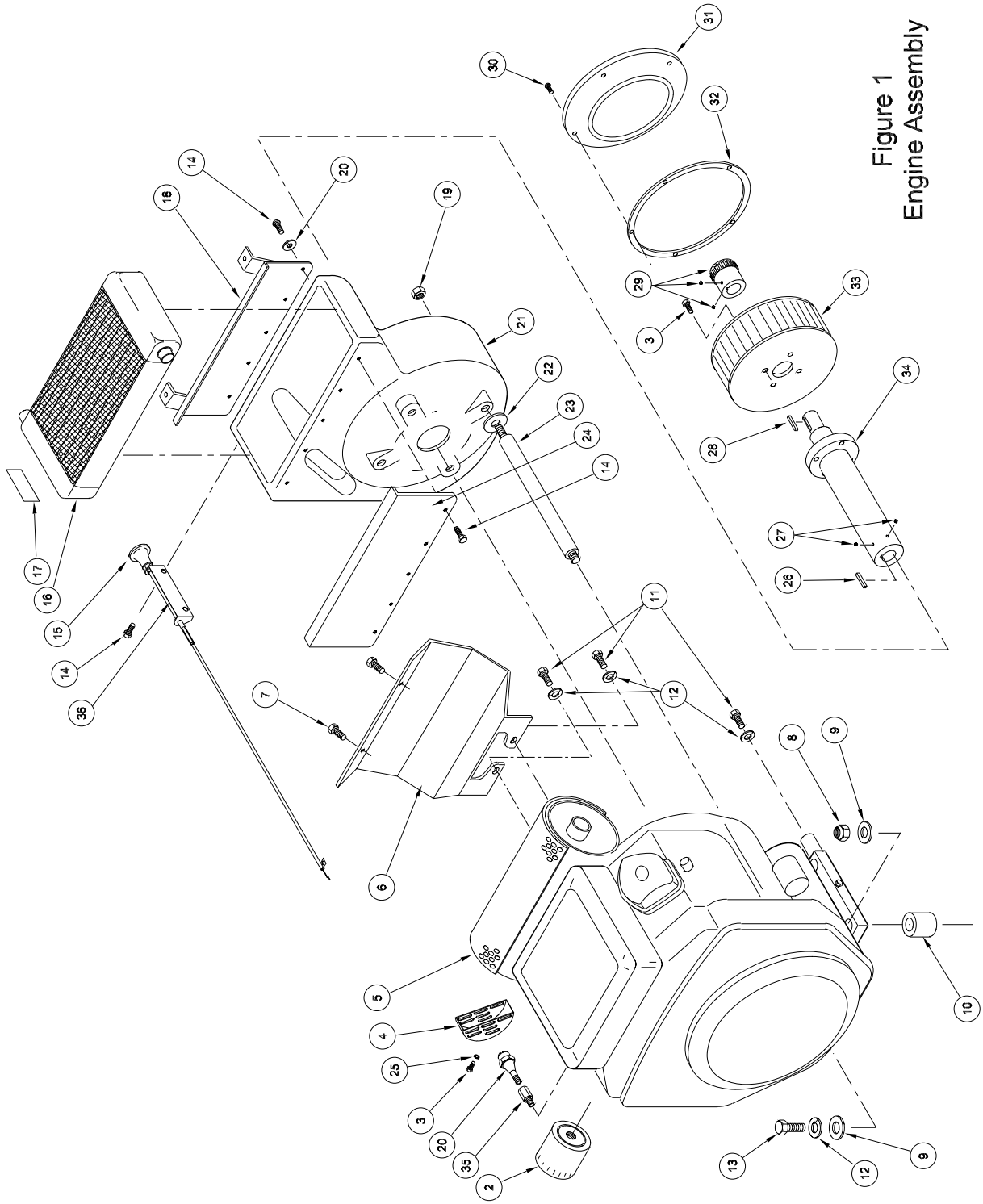


Figure 1
Engine Assembly

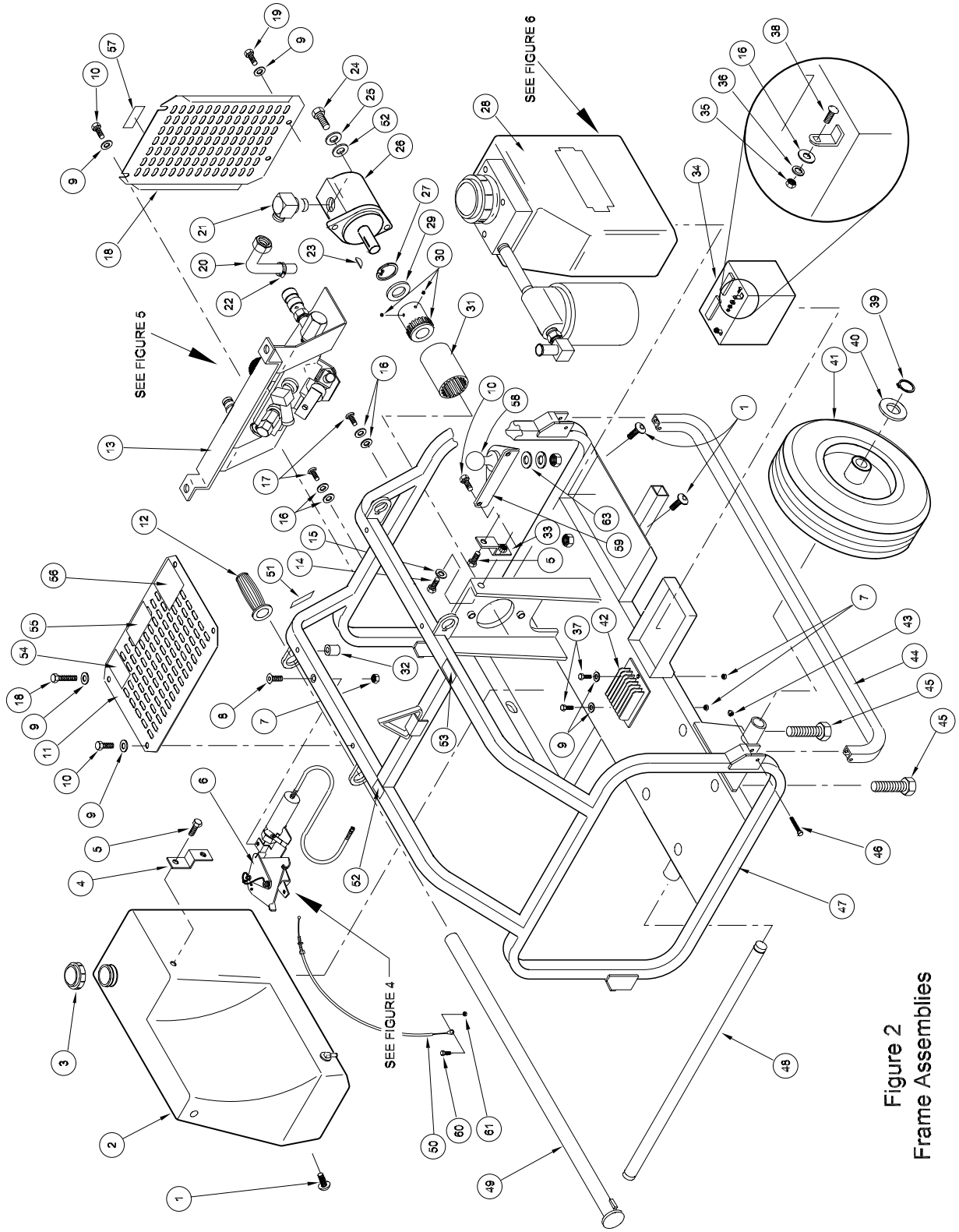


Figure 2
Frame Assemblies

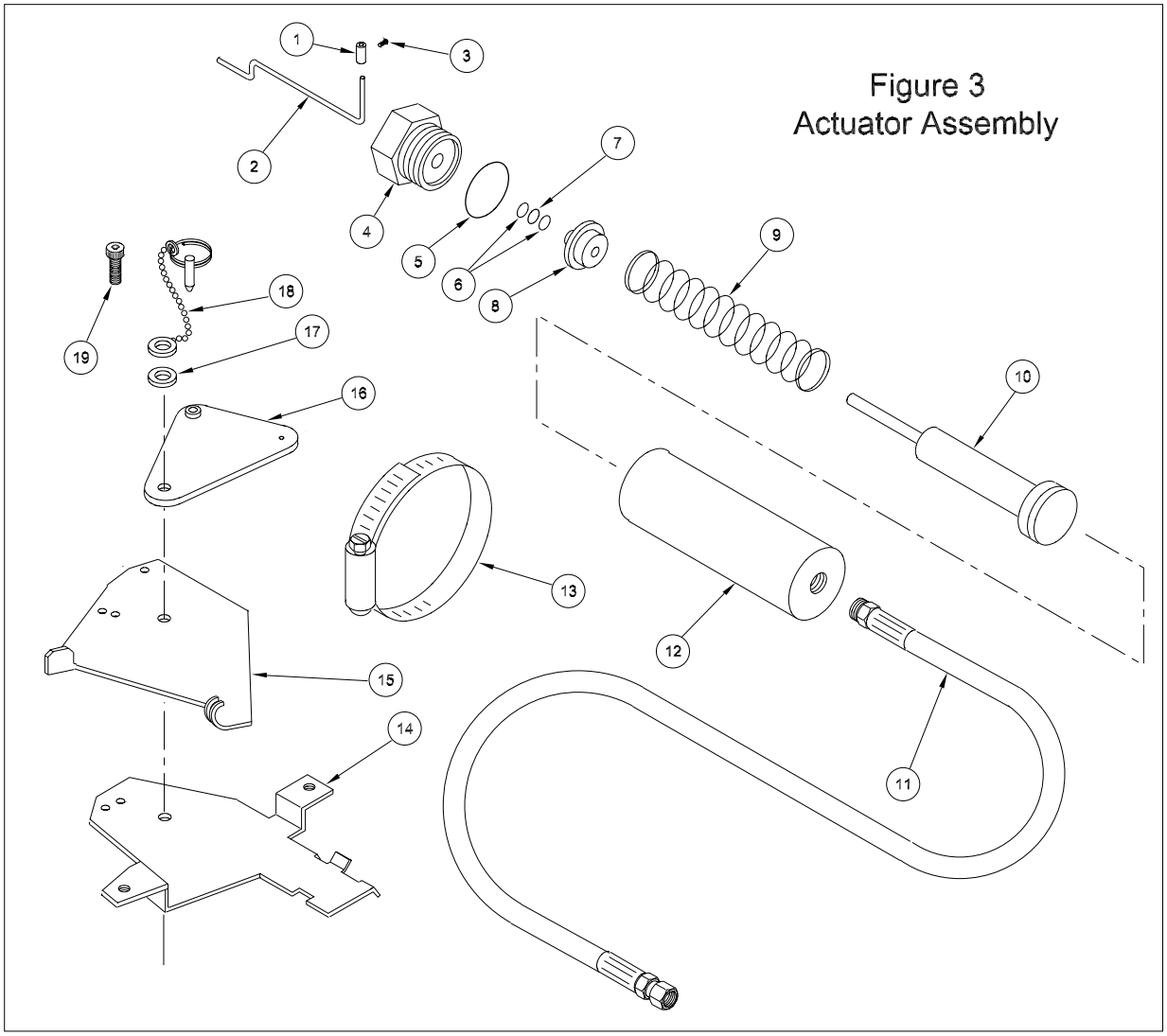


Figure 3
Actuator Assembly
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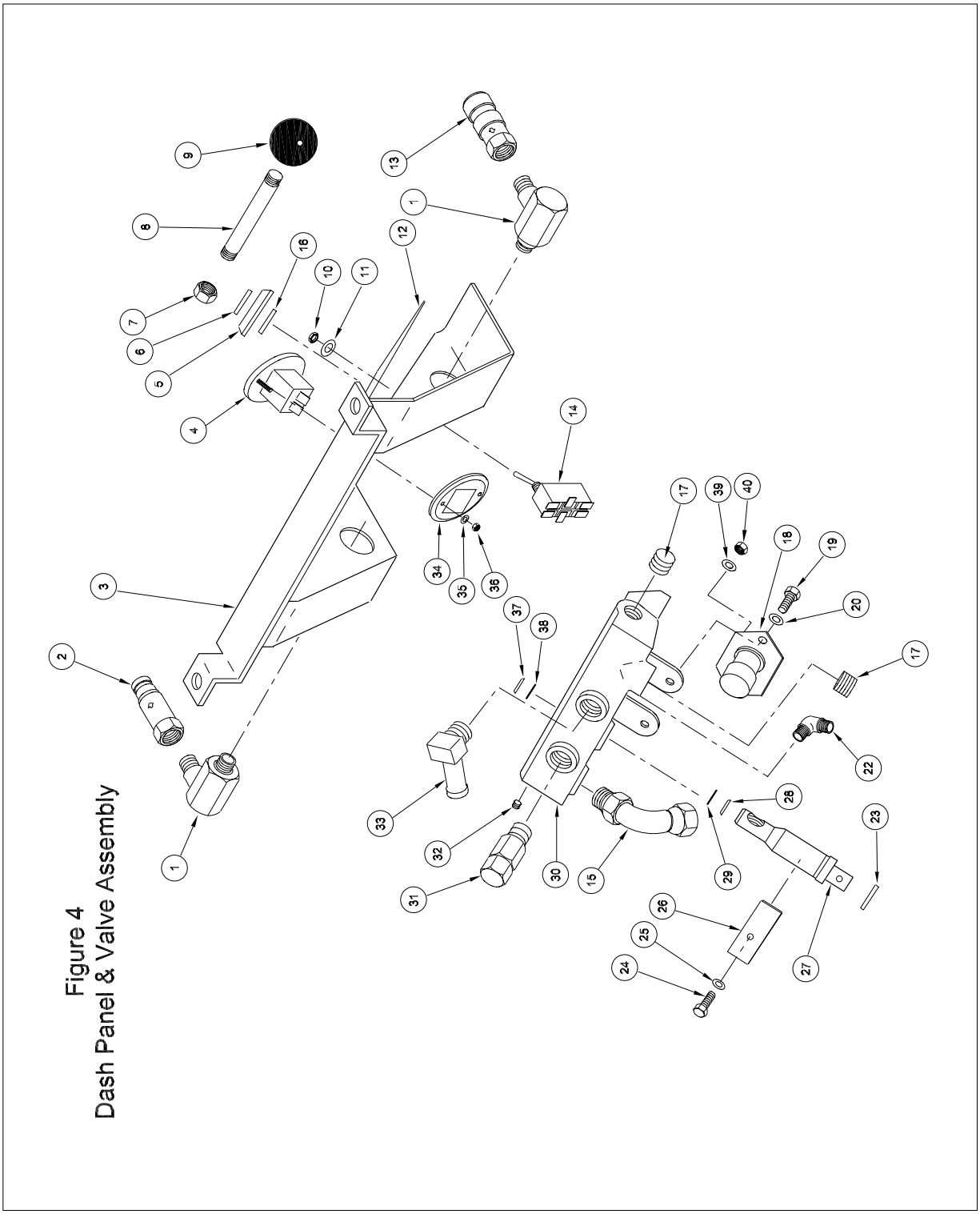
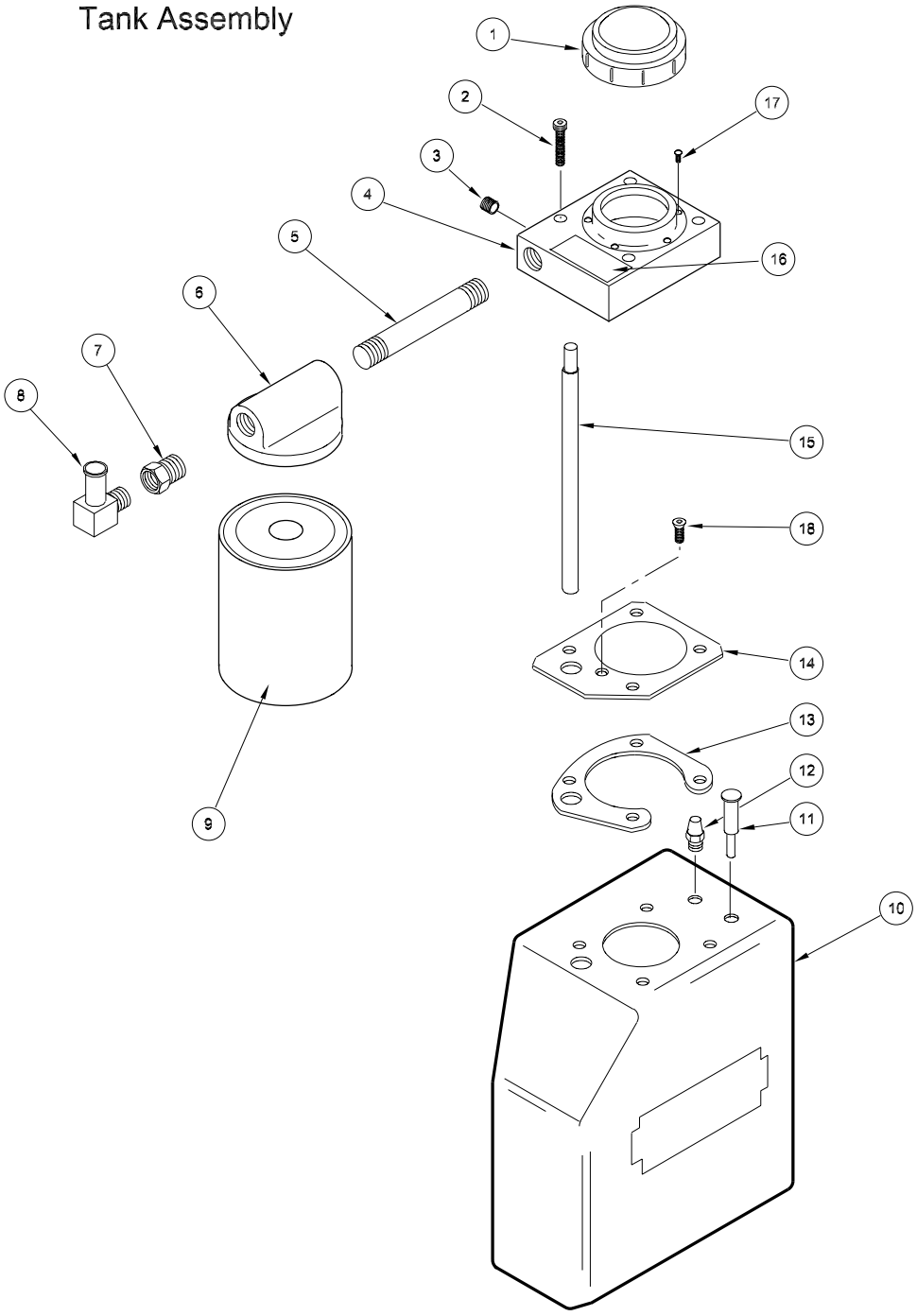


Figure 4
Dash Panel & Valve Assembly

Figure 5
Tank Assembly



NOTE: Wiring from the engine to the dash panel is secured to the standoffs with plastic wire ties.

Wire ties are used as required to keep wires bundled and secure.

SEE THE WIRING DIAGRAM (Fig. 8) FOR WIRE CONNECTIONS AND COLORS.

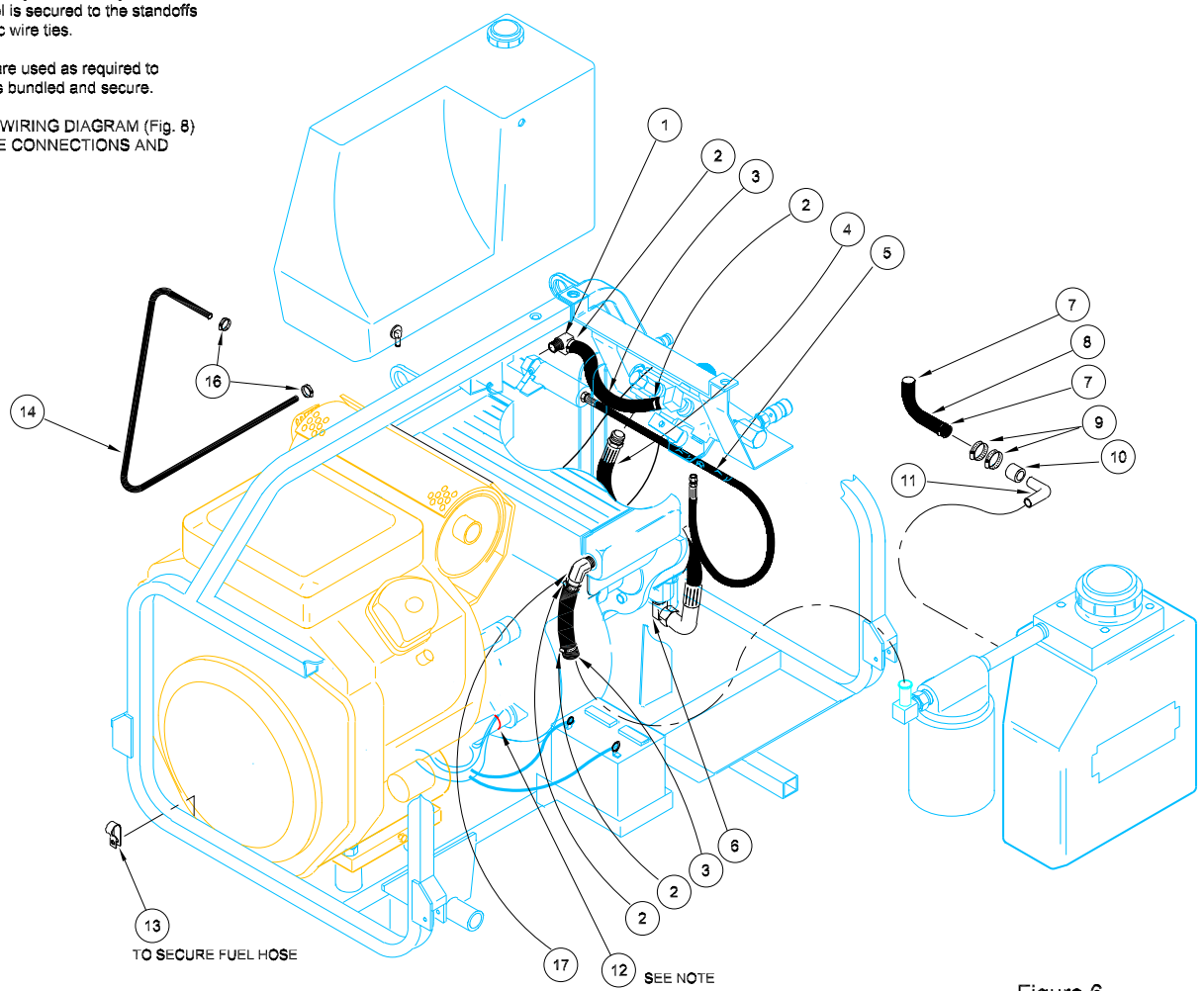


Figure 6
Hoses, Fittings, and Clamps

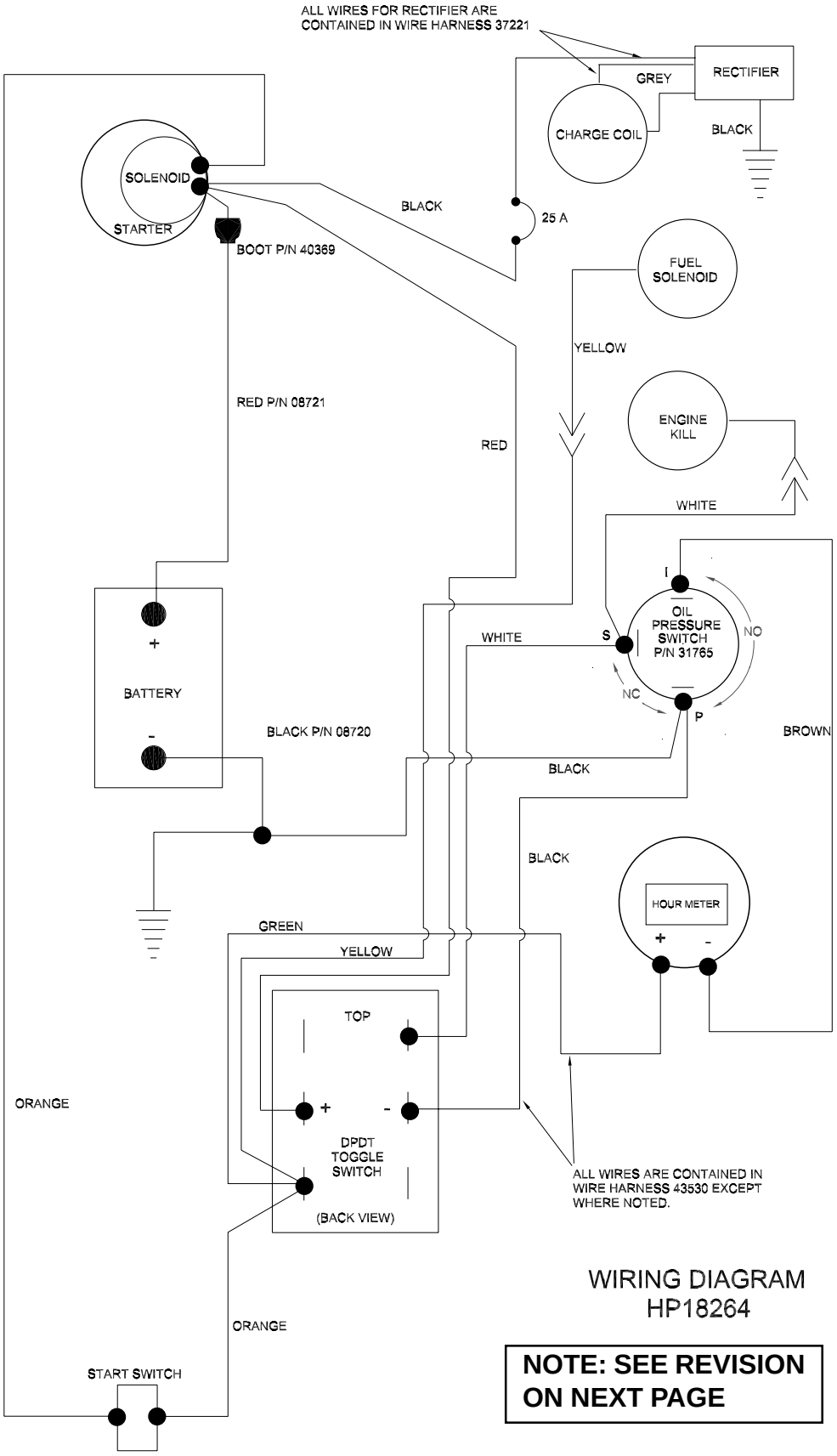


Figure 7. Wiring Diagram

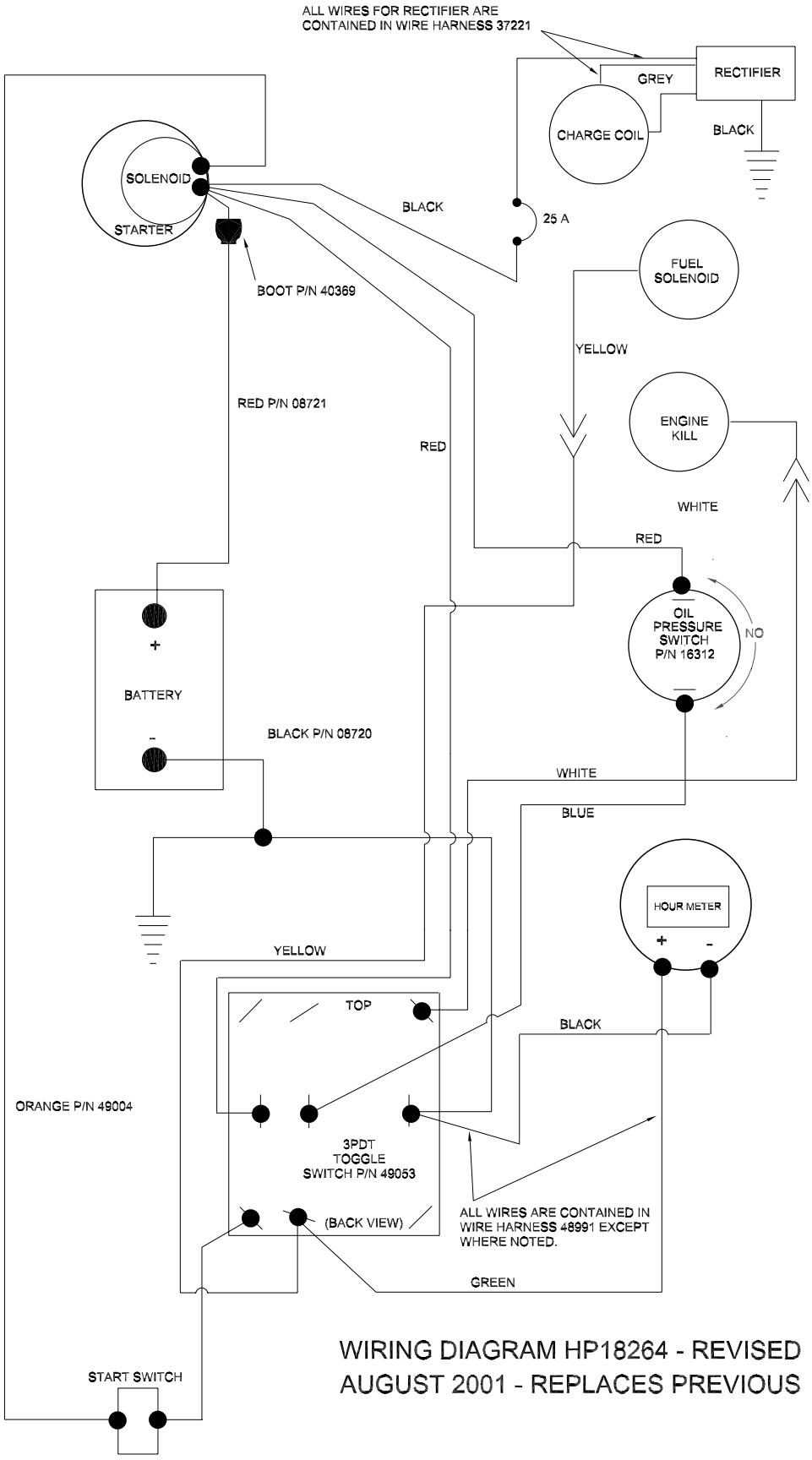


Figure 9. Wiring Diagram - Revised

WARRANTY

Stanley Hydraulic Tools (hereinafter called “Stanley”), subject to the exceptions contained below, warrants new hydraulic tools for a period of one year from the date of sale to the first retail purchaser, or for a period of 2 years from the shipping date from Stanley, whichever period expires first, to be free of defects in material and/or workmanship at the time of delivery, and will, at its option, repair or replace any tool or part of a tool, or new part, which is found upon examination by a Stanley authorized service outlet or by Stanley’s factory in Milwaukie, Oregon to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP.

EXCEPTIONS FROM WARRANTY

NEW PARTS: New parts which are obtained individually are warranted, subject to the exceptions herein, to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage. Seals and diaphragms are warranted to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage or 2 years after the date of delivery, whichever period expires first. Warranty for new parts is limited to replacement of defective parts only. Labor is not covered.

FREIGHT COSTS: Freight costs to return parts to Stanley, if requested by Stanley for the purpose of evaluating a warranty claim for warranty credit, are covered under this policy if the claimed part or parts are approved for warranty credit. Freight costs for any part or parts which are not approved for warranty credit will be the responsibility of the individual.

SEALS & DIAPHRAGMS: Seals and diaphragms installed in new tools are warranted to be free of defects in material and/or workmanship for a period of 6 months after the date of first usage, or for a period of 2 years from the shipping date from Stanley, whichever period expires first.

CUTTING ACCESSORIES: Cutting accessories such as breaker tool bits are warranted to be free of defects in material and or workmanship at the time of delivery only.

ITEMS PRODUCED BY OTHER MANUFACTURERS: Components which are not manufactured by Stanley and are warranted by their respective manufacturers.

a. Costs incurred to remove a Stanley manufactured component in order to service an item manufactured by other manufacturers.

ALTERATIONS & MODIFICATIONS: Alterations or modifications to any tool or part. All obligations under this warranty shall be terminated if the new tool or part is altered or modified in any way.

NORMAL WEAR: any failure or performance deficiency attributable to normal wear and tear such as tool bushings, retaining pins, wear plates, bumpers, retaining rings and plugs, rubber bushings, recoil springs, etc.

INCIDENTAL/CONSEQUENTIAL DAMAGES: To the fullest extent permitted by applicable law, in no event will STANLEY be liable for any incidental, consequential or special damages and/or expenses.

FREIGHT DAMAGE: Damage caused by improper storage or freight handling.

LOSS TIME: Loss of operating time to the user while the tool(s) is out of service.

IMPROPER OPERATION: Any failure or performance deficiency attributable to a failure to follow the guidelines and/or procedures as outlined in the tool’s operation and maintenance manual.

MAINTENANCE: Any failure or performance deficiency attributable to not maintaining the tool(s) in good operating condition as outlined in the Operation and Maintenance Manual.

HYDRAULIC PRESSURE & FLOW, HEAT, TYPE OF FLUID: Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, excess hydraulic flow, excessive heat, or incorrect hydraulic fluid.

REPAIRS OR ALTERATIONS: Any failure or performance deficiency attributable to repairs by anyone which in Stanley’s sole judgement caused or contributed to the failure or deficiency.

MIS-APPLICATION: Any failure or performance deficiency attributable to mis-application. “Mis-application” is defined as usage of products for which they were not originally intended or usage of products in such a matter which exposes them to abuse or accident, without first obtaining the written consent of Stanley. PERMISSION TO APPLY ANY PRODUCT FOR WHICH IT WAS NOT ORIGINALLY INTENDED CAN ONLY BE OBTAINED FROM STANLEY ENGINEERING.

WARRANTY REGISTRATION: STANLEY ASSUMES NO LIABILITY FOR WARRANTY CLAIMS SUBMITTED FOR WHICH NO TOOL REGISTRATION IS ON RECORD. In the event a warranty claim is submitted and no tool registration is on record, no warranty credit will be issued without first receiving documentation which proves the sale of the tool or the tools’ first date of usage. The term “DOCUMENTATION” as used in this paragraph is defined as a bill of sale, or letter of intent from the first retail customer. A WARRANTY REGISTRATION FORM THAT IS NOT ALSO ON RECORD WITH STANLEY WILL NOT BE ACCEPTED AS “DOCUMENTATION”.

NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

This limited warranty and the obligation of Stanley thereunder is in lieu of all other warranties, expressed or implied including merchantability or fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.

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