
MHP1

Mobile Hydraulic Power Unit

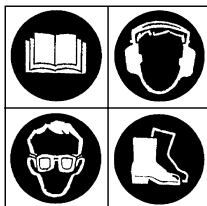


Safety, Operation and Routine Maintenance User's Manual

 **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.



Accessories	17
Disengaging Gear Boxes	16
Hydraulic Hose Requirements	5
Hydraulic Hose & Fitting Connections	6 - 7
Loading & Unloading	13 - 14
Operation	8 - 13
Parts Lists	18 - 23
Routine Maintenance	14 - 15
Safety Precautions	2 - 3
Specifications	17
Tool Stickers and Tags	4
Transporting	14
Troubleshooting	16
Warranty	25
Wiring Diagram	24

SERVICING THE MHP1: This manual contains safety, operation, and routine maintenance instructions. Stanley Hydraulic Tools recommends that servicing of this equipment, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

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.



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 machine.

These safety precautions are given for your safety. Review them carefully before operating the machine and before performing general maintenance or routine service.

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 3.

GENERAL SAFETY PRECAUTIONS



If you have not read this manual or the engine manual, you are not ready to operate the MHP1. Read and understand this manual and any stickers and tags attached to the machine before operation. Failure to do so can result in equipment damage, personal injury, or death.

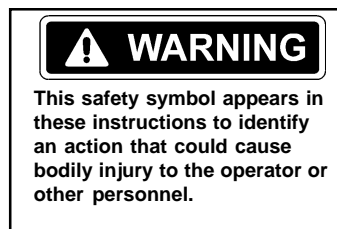
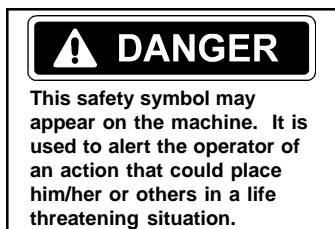
- Operate the machine in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- DO NOT operate the machine ACROSS excessive slopes where "tip over" is a hazard.
- DO NOT operate the machine in confined areas where there may be a risk of crushing the operator between the machine and another object.
- DO NOT operate the machine in enclosed spaces. Inhalation of engine exhaust can be fatal.
- DO NOT wear loose clothing that can get entangled in the working parts of the machine or hydraulic tools.
- DO NOT add fuel to the machine while it is running or still hot.
- DO NOT operate the machine if a fuel odor is present.
- DO NOT operate the machine within 3.3 ft./1 m of buildings, obstructions, or flammable objects.
- Allow the engine to cool before storing the machine in an enclosure.
- DO NOT ride on, or allow anyone else to ride on, the machine at any time.
- Establish a training program for all operators to ensure safe operation.
- DO NOT operate the machine unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear, head protection, and safety shoes at all times when operating the machine.
- DO NOT inspect or clean the machine while the engine is running. Accidental engagement of the machine can cause serious injury or death.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling hydraulic tools.

Wipe all couplers clean before connecting. Use only lint-free cloths. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.

- Before operating hydraulic tools, read and understand the operation manual furnished with the tool.
- DO NOT operate a damaged, or improperly adjusted, machine.
- DO NOT weld or cut with an acetylene torch any surface or component of the equipment. Consult with the Stanley factory before performing any welding or acetylene cutting of the equipment.
- Prevent possible personal injury or equipment damage by having all repair, maintenance and service performed only by authorized and properly trained personnel.
- DO NOT exceed the rated limits of the equipment or use the equipment for applications beyond its design capacity.
- Always keep critical markings, such as labels and warning stickers legible.
- Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.

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.



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

LOCAL SAFETY REGULATIONS

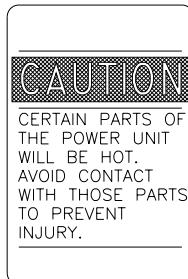
Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

TOOL STICKERS & TAGS

Dual Circuit Valve Block Decal P/N-28045

FOR ONE OR TWO 5 GPM TOOLS, PUSH THE COMBINER KNOB IN. FOR ONE 10 GPM TOOL, PULL THE COMBINER KNOB OUT AND TURN BOTH TOOL VALVES ON.

Caution Decal P/N-28089



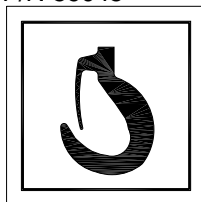
Choke Decal P/N-07764



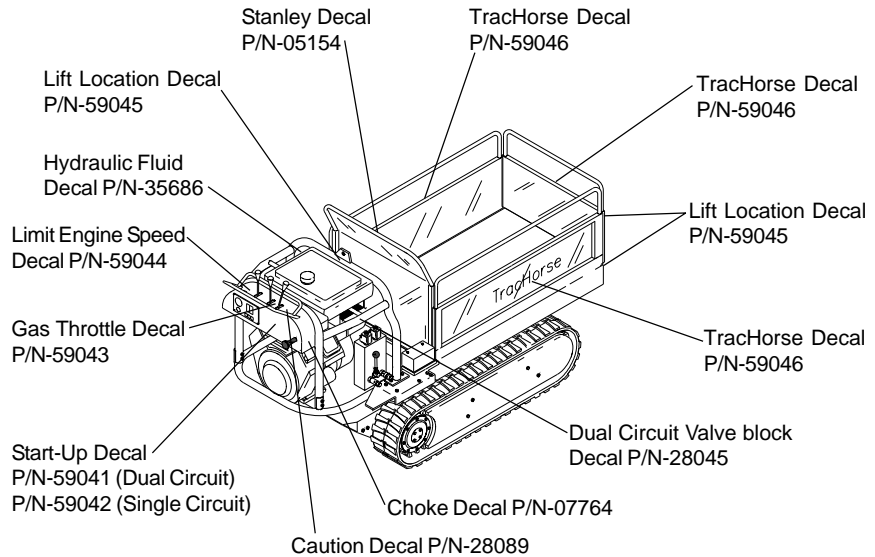
Hydraulic Fluid Decal P/N-35686



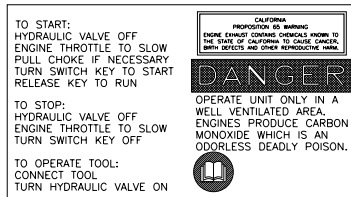
Lift Location Decal P/N-59045



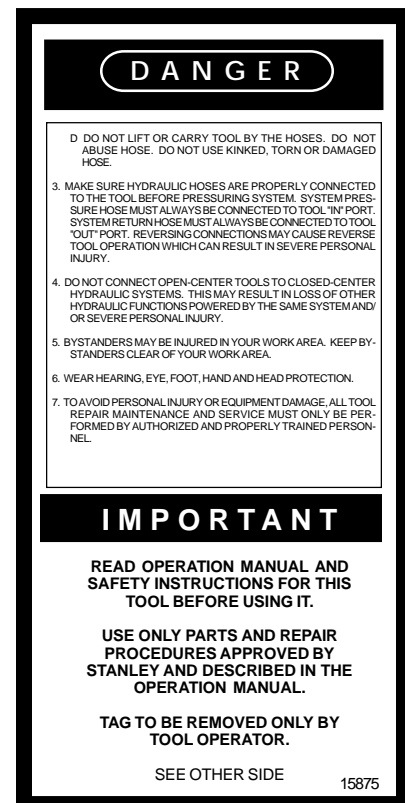
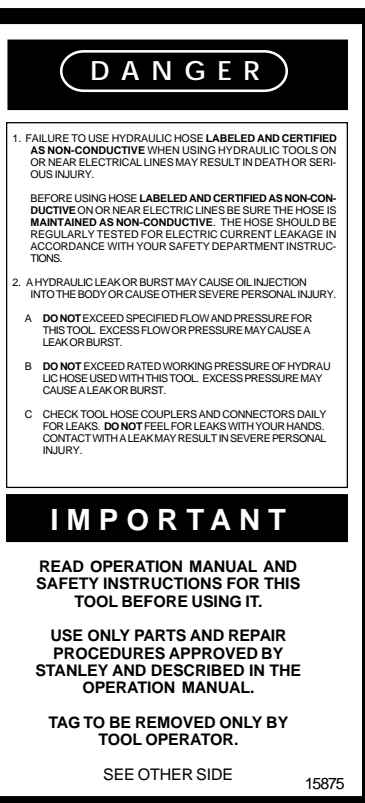
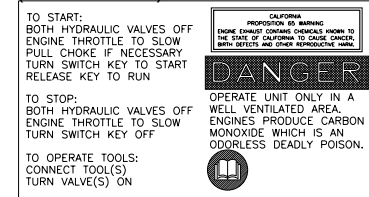
The safety tag (p/n 15875) at right is attached to the machine when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the machine when not in use.



Start-Up Decal P/N 59042 (Single Circuit)



Start-Up Decal P/N 59041 (Dual Circuit)



SAFETY TAG P/N 15875 (shown smaller than actual size)

TOOL CIRCUIT 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.

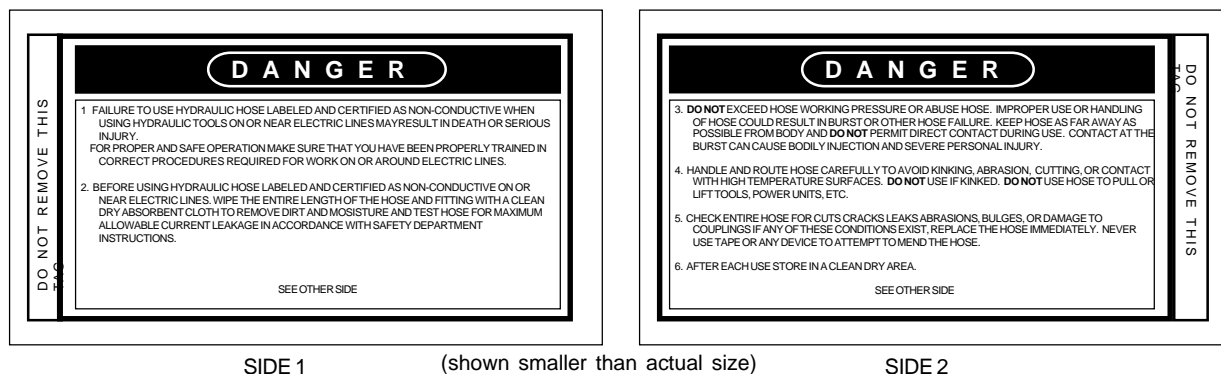
Hoses ② and ③ listed above are **conductive** and **must never** be used near electrical conductors.

HOSE SAFETY TAGS

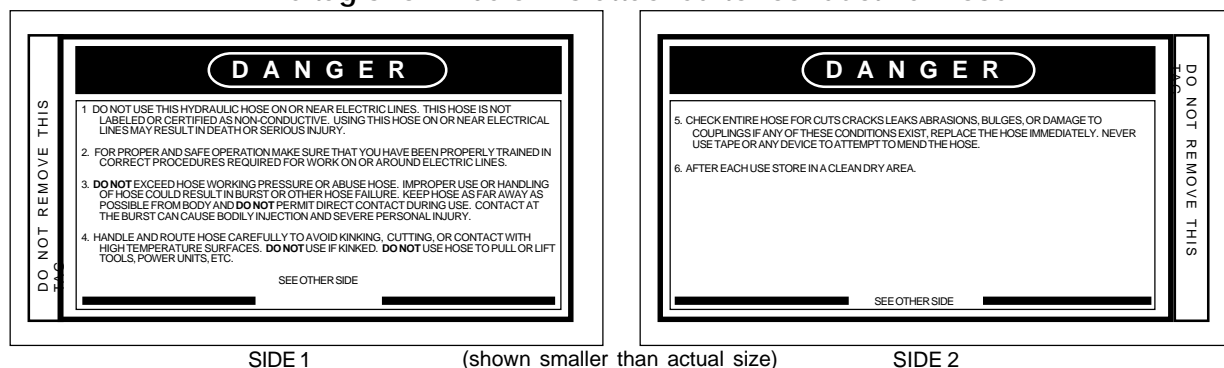
To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley Hydraulic Tools. **DO NOT REMOVE THESE TAGS.**

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.

The tag shown below is attached to "certified non-conductive" hose.



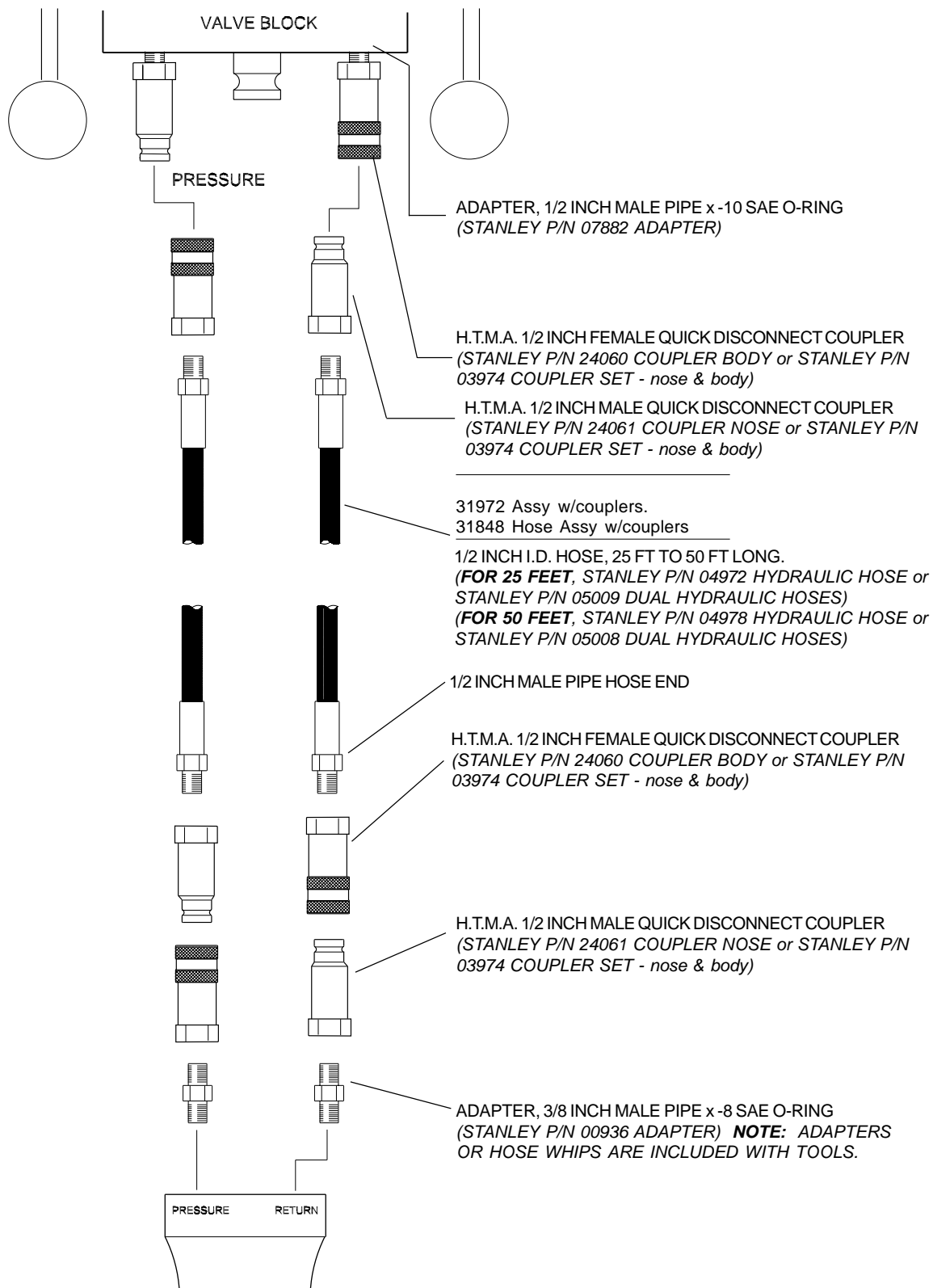
The tag shown below is attached to "conductive" hose.



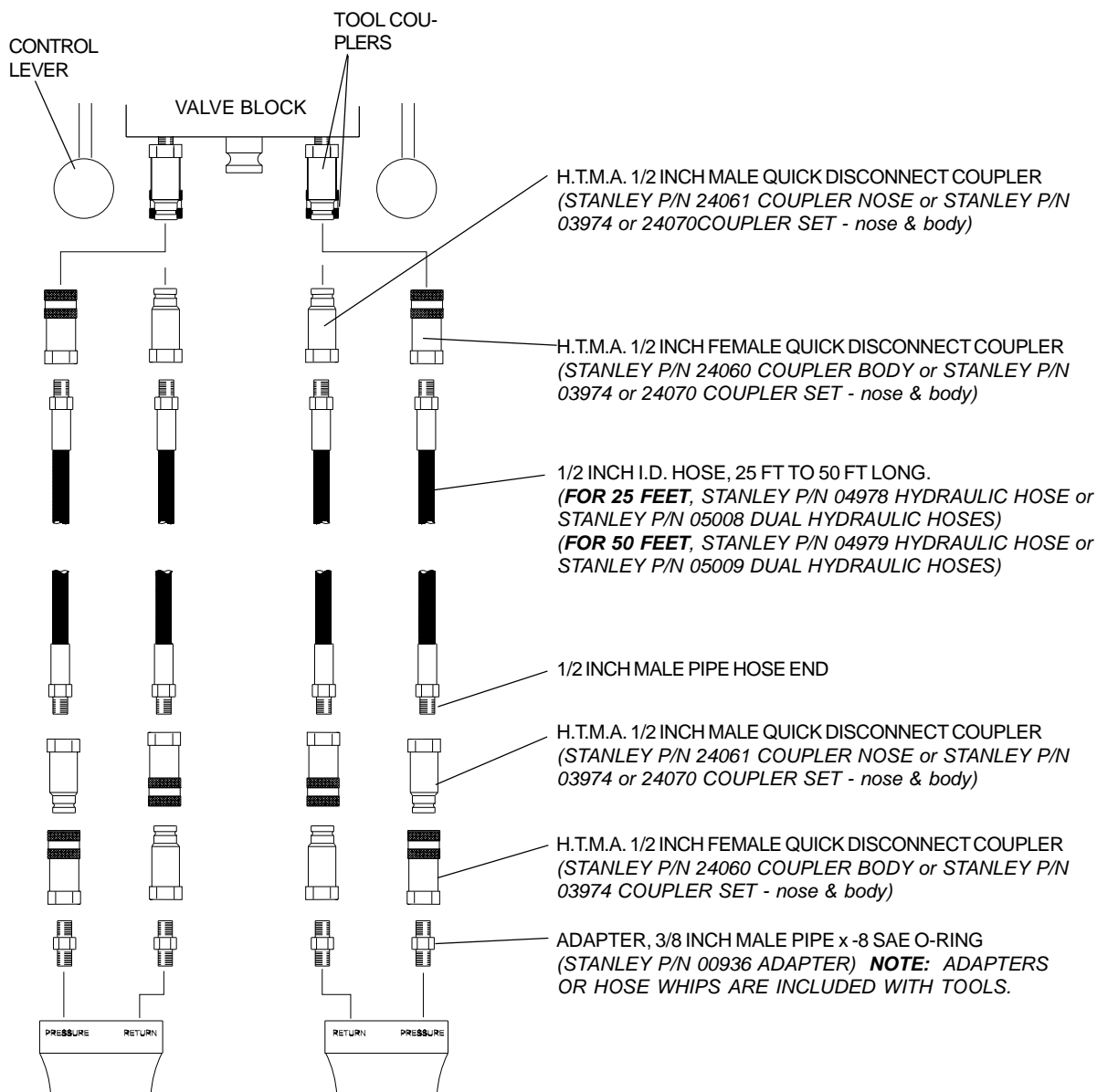
HOSE PRESSURE RATING

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

HOSE & FITTING CONNECTIONS for SINGLE CIRCUIT



HOSE & FITTING CONNECTIONS for DUAL CIRCUIT



PREOPERATION PROCEDURES

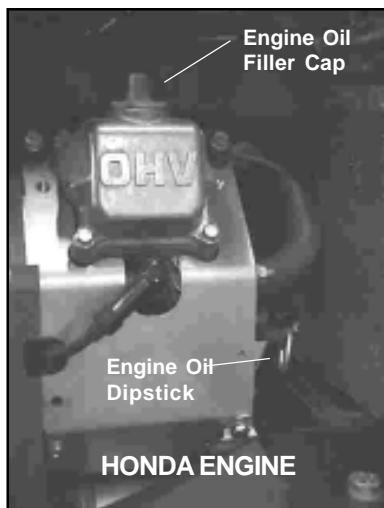
Preparation For Initial Use

The equipment, as shipped, has no special unpacking or assembly requirements prior to usage. Inspection to assure the equipment was not damaged in shipping, does not contain packing debris, and checking fluid levels as described below, is all that is required.

Engine Oil Level

Before each use, check the engine oil level. Make sure the engine 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.

The engine oil dipstick is located on the right side of the engine for both the Honda and B & S engines.



Engine Fuel Level

Check the fuel level. If low, fill with unleaded gasoline with a minimum of 85 octane rating.

Warning Lights

Engine Oil

A warning light is located on the instrument panel near the ignition key. The light comes on when the ignition key is turned to the "ON" position. After the engine is started, the light should turn off. If the light stays on, the engine oil is low. Shut down the engine immediately and check the engine oil level. Add oil as required.



Low Engine Oil
Warning Light

Hydraulic Fluid

A warning light is located on the instrument panel near the ignition key. The light DOES NOT COME ON when the ignition key is turned to the "ON" position unless the hydraulic fluid level is too low. If the hydraulic fluid level is too low, the light will stay on after the engine has been started. Shut down the engine immediately and add hydraulic fluid as required. When the hydraulic fluid level is correct, the light should not be on.



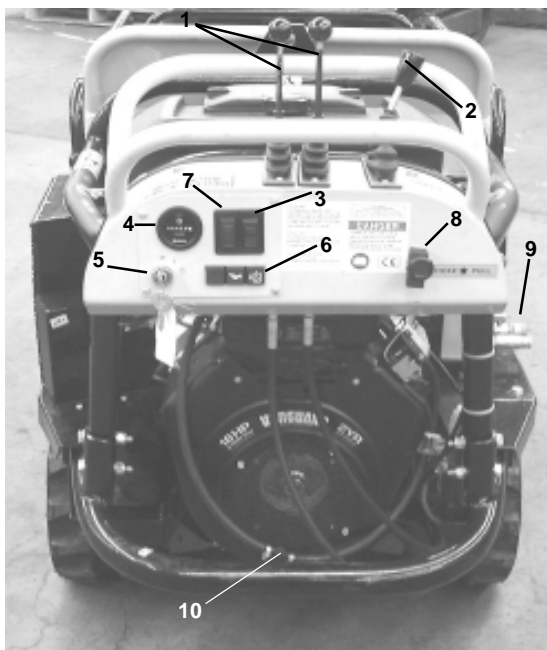
Low Hydraulic
Fluid Warning
Light



Low hydraulic fluid indicates a leak in the hydraulic system. Inspect all hydraulic connections and hydraulic components for leaks. DO NOT use the equipment until leaks are repaired.

OPERATION

Location of Instruments, Switches, and Controls



NOTE: Use caution when operating or ordering items 3 & 7 they can come installed opposite of what is illustrated above. The Bed up/down switch is spring loaded and will return to the center position when released. The tool circuit on/off switch is either on or off (2 way) no center position.

1. Left & Right Track Controls for Forward, Reverse, and Left, Right Steering
2. Throttle
3. Tool Circuit ON/OFF Switch
4. Hour Meter
5. Key Ignition
6. Warning Lights
7. Bed UP/DOWN Switch
8. Choke
9. Tool Circuit Controls
10. Fuel Shutoff

Starting The Engine

1. Ensure the tool circuit control lever(s) are in the OFF position and the tool circuit switch is in the OFF position.
2. Pull the choke out until it stops.
3. Move the throttle to a position between "SLOW" and "FAST".
4. Turn the ignition key clockwise to begin cranking the engine. Use short starting cycles (15 seconds per minute) to prolong starter life. Extended cranking can

damage the starter motor.

5. After the engine starts, allow it to warm-up for a few seconds before moving the choke. Move the choke inward in small steps to allow the engine to accept small changes in speed and load. Continue moving the choke in until it is fully off and the engine is running smoothly.
6. Adjust the throttle for the work to be done. See "Adjusting Throttle For Various Types of Work".

Stopping The Engine

1. Move the throttle to the "SLOW" position.
2. Ensure the tool circuit control lever(s) are in the OFF position and the tool circuit switch is in the "OFF" position.
3. Turn the ignition key counter clockwise to the "OFF" position.

Adjusting Throttle for Various Types of Work

Forward Travel

The throttle can be positioned anywhere between "SLOW" and "FAST" for traveling forward depending on the weight of the load being carried. Heavy loads will require higher throttle settings in order for the engine to provide enough power to move the load.

Reverse Travel

Position the throttle to "SLOW" for reverse travel to permit increased control and safety.



DO NOT attempt to travel in reverse with the throttle positioned above "SLOW". This may result in loss of control and result in injury or death to the operator.

Bed Cylinder

The throttle may be positioned anywhere between "SLOW" and "FAST" when operating the bed.

Tool Circuit

The throttle must be positioned to "FAST" when using the tool circuit. Slower throttle settings will stall the engine or provide reduced oil flow.

Slope Operation


DO NOT operate the machine on slopes exceeding 60 degrees in the travel direction or across slopes exceeding 45 degrees..

Avoid turning on slopes. If you must turn, turn slowly downhill, if possible.

DO NOT operate the machine near drop-offs, ditches, or embankments. The machine could suddenly turn over if a track goes over the edge or if an edge collapses.

DO NOT try to stabilize the machine if it is tipping over. Let go of the machine and get out of its way.

Traveling Forward or Reverse

**DANGER**

When first learning to operate the Track Horse, position the throttle to the "SLOW" position. More experienced operators may use higher throttle settings.

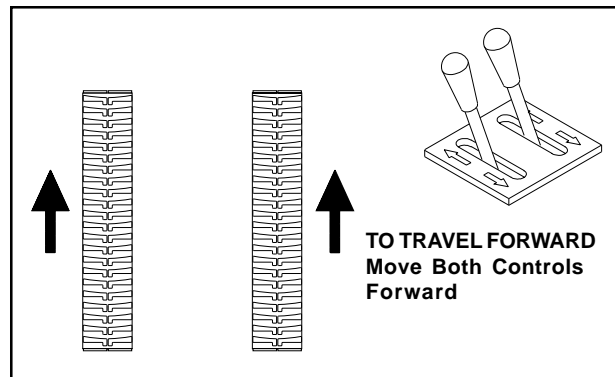


Track Steering Controls

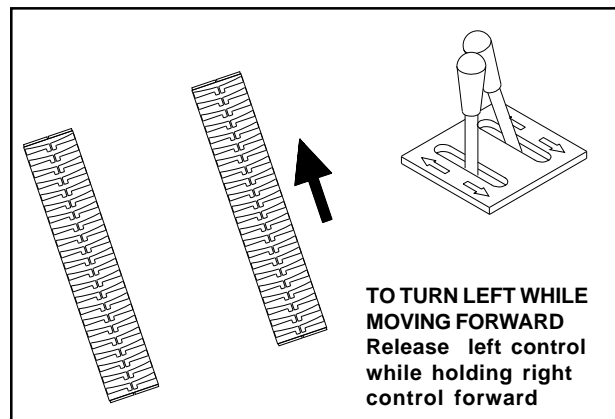
To travel forward, reverse, turn left, or turn right, do the following:

Forward Travel

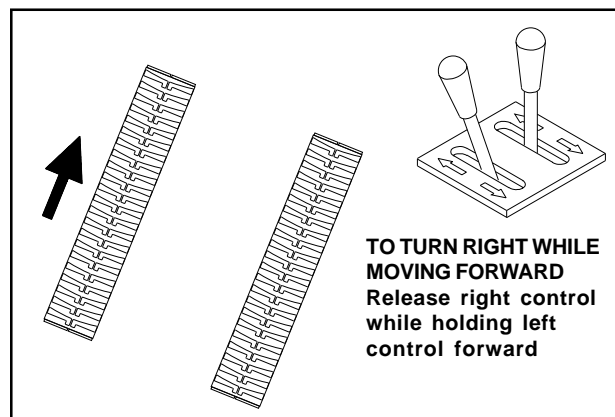
TO MOVE FORWARD IN A STRAIGHT LINE: Move both the left and right track controls forward at the same time.



TO TURN LEFT WHILE MOVING FORWARD:
Release the left track control while pushing forward on the right track control. Resume pushing forward on the left track control to move forward in a straight line.



TO TURN RIGHT WHILE MOVING FORWARD:
Release the right track control while pushing forward on the left track control. Resume pushing forward on the right track control to move forward in a straight line.



Reverse Travel

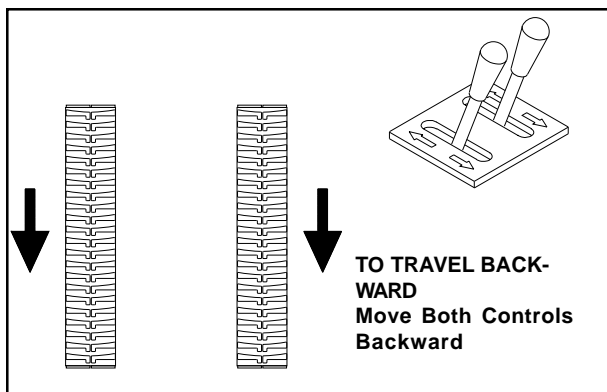


DANGER

DO NOT attempt to travel in reverse with the throttle positioned above "SLOW". This may result in loss of control and result in injury or death to the operator.

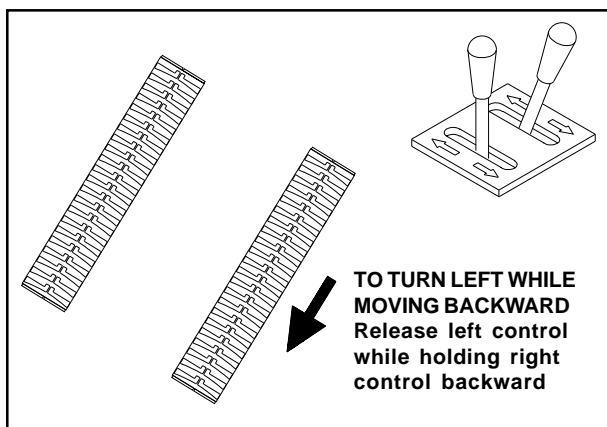
TO MOVE BACKWARDS IN A STRAIGHT LINE:

Move both the left and right track controls backward at the same time.



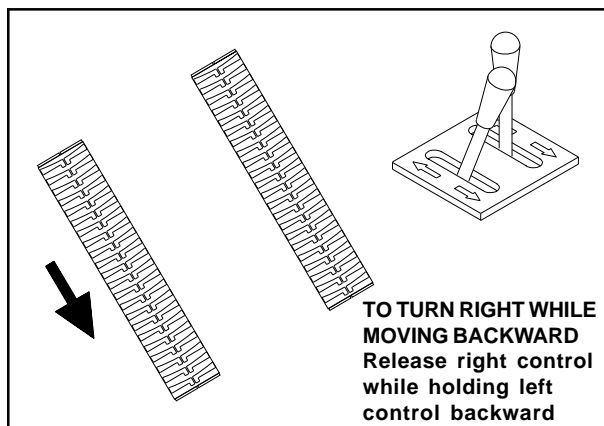
TO TURN LEFT WHILE MOVING BACKWARD:

Release the left track control while pulling backward on the right track control. Resume pulling backward on the left track control to move backward in a straight line.



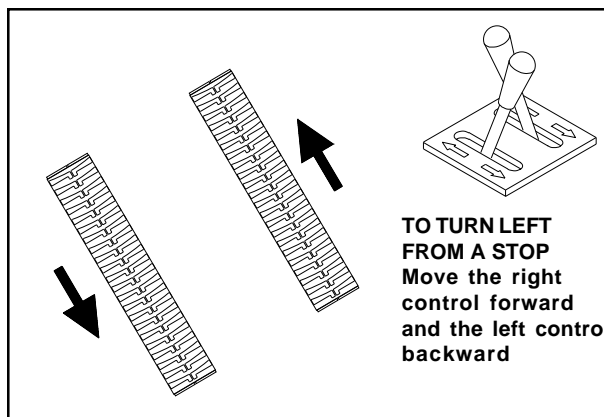
TO TURN RIGHT WHILE MOVING BACKWARD:

Release the right track control while pulling backward on the left track control. Resume pulling backward on the right track control to move backward in a straight line.

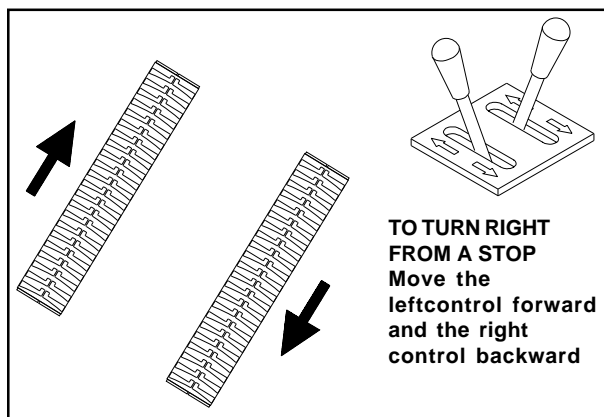


Turning From A Stop

TO TURN LEFT FROM A STOP: Move the right track control forward and the left track control backward.



TO TURN RIGHT FROM A STOP: Move the left track control forward and the right track control backward.



Bed Operation

1. Adjust the throttle to a "SLOW" to "MEDIUM" setting.
2. Press the rocker switch on the instrument panel to raise or lower the bed.



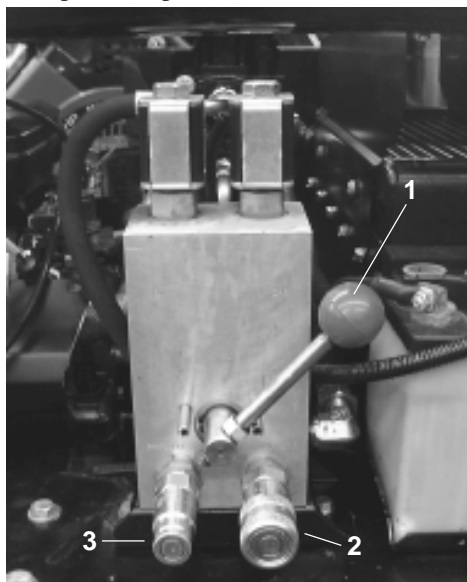
WARNING

Ensure the tailgate has been removed before lifting the dump bed. This will prevent loaded material from staying in the dump bed which may cause the equipment to become unstable.

Hydraulic Tool Operation

Single Tool Circuit (model MHP11111000)

The single tool circuit found on the TracHorse model MHP11111000 produces 8 gpm/30 lpm with pressure up to 2000 psi/140 bar.



Single Tool Circuit on model MHP11111000

Above illustration shown in the OFF position

1. ON/OFF Control
2. Male Coupler (Pressure)
3. Female Coupler (Return)

Using The Tool Circuit

1. Ensure the tool circuit ON/OFF switch located on the instrument panel is in the "OFF" position and the throttle is in the "SLOW" position.
2. Connect hydraulic hoses from the tool to the pressure and return couplers of the tool circuit.

The recommended hose length to use with hydraulic tools is 25 ft/8 mm with a 1/2 inch/12.7 mm inside diameter. See the pages covering hydraulic hose requirements and connections found earlier in this manual.

3. Adjust the throttle to the "FAST" position.
4. Press the tool circuit ON/OFF switch to the "ON" position.



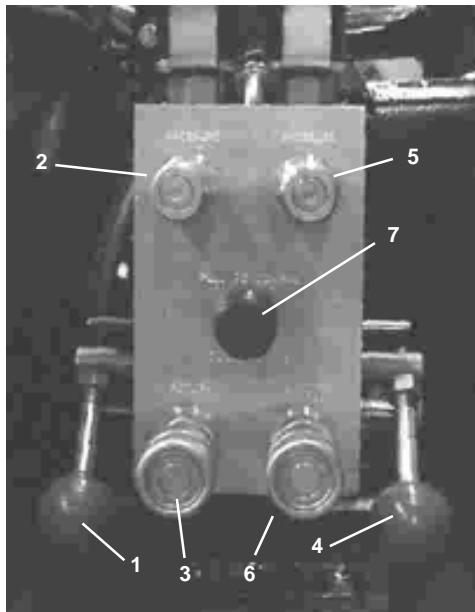
5. Activate the tool circuit by moving the ON/OFF control lever to the right.
6. When finished using the tool, move the control lever to the left, press the tool circuit ON/OFF switch to the "OFF" position, and move the throttle to the "SLOW" position.

CAUTION

Before disconnecting hydraulic tools, ensure the tool circuit control lever is in the "OFF" position and the throttle is in the "SLOW" position.

Dual Tool Circuit (model MHP12211000)

The dual tool circuit found on the TracHorse model MHP12211000 provides two hydraulic tool circuits, each with an oil flow of 5 gpm/19 lpm with pressure up to 2000 psi/140 bar. The two circuits may be combined into one circuit providing 10 gpm/38 lpm and pressure up to 2000 psi/140 bar.



Dual Tool Circuit on model MHP12211000

Above illustration shown in the OFF position

1. ON/OFF Control, Left Tool Circuit
2. Male Coupler (Pressure), Left Tool Circuit
3. Female Coupler (Return), Left Tool Circuit
4. ON/OFF Control, Right Tool Circuit
5. Male Coupler (Pressure), Right Tool Circuit
6. Female Coupler (Return), Right Tool Circuit
7. Circuit Combiner Knob

Using 1 or 2 Tool Circuits at 5 gpm/19 lpm

1. Ensure the tool circuit ON/OFF switch located on the instrument panel is in the "OFF" position and the throttle is in the "SLOW" position.
2. Push the circuit combiner knob "IN".

When the circuit combiner knob is pushed in, either the left, right, or both circuits may be used. When the circuit combiner knob is pulled out, the two circuits are combined into one 10 gpm/38 lpm circuit but only one circuit may be used.

3. If using only one tool, connect hydraulic hoses from the tool to the pressure and return couplers of either the left or right circuit. If using two tools connect hydraulic hoses from each tool to the pressure and return couplers of each circuit.

The recommended hose length to use with hydraulic tools is 25 ft/8 mm with a 1/2 inch/12.7 mm inside diameter. See the pages covering hydraulic hose requirements and connections found earlier in this manual.

4. Adjust the throttle to the "FAST" position.

5. Press the tool circuit ON/OFF switch to the "ON" position.



6. Activate each tool circuit by moving the control lever up. If only one tool is connected, activate that circuit only.
7. When finished using the tool or tools, move the control lever(s) down, press the tool circuit ON/OFF switch to the "OFF" position, and move the throttle to the "SLOW" position.



Before disconnecting hydraulic tools, ensure the tool circuit control levers are in the down position and the throttle is in the "SLOW" position.

Using 1 Tool Circuit at 10 gpm/38 lpm

1. Ensure the tool circuit ON/OFF switch located on the instrument panel is in the "OFF" position and the throttle is in the "SLOW" position.
2. Pull the circuit combiner knob "OUT".
3. Connect hydraulic hoses from the tool to the pressure and return couplers of either the left or right circuit. The other circuit must not have a tool connected to it or have the hoses connected from the pressure and return couplers. **DO NOT** cross from one circuit to the other.
4. Adjust the throttle to the "FAST" position.
5. Press the tool circuit ON/OFF switch to the "ON" position.
6. Activate the tool circuit by moving both control levers up.
7. When finished using the tool, move the control levers down, press the tool circuit ON/OFF switch to the "OFF" position, and move the throttle to the "SLOW" position.



Before disconnecting hydraulic tools, ensure the tool circuit control levers are in the down position and the throttle is in the "SLOW" position.

COLD WEATHER OPERATION

Fluids are thicker in cold weather, therefore, it is recommended that the engine be run at low idle long enough to warm the engine and bring the hydraulic system temperature to a minimum of 50°F/10°C.

If hydraulic tools and hoses are to be used, it is recommended to allow hydraulic fluid to circulate through the tools and hoses until warm before use.

LOADING AND UNLOADING

1. Use loading ramps or a loading dock to load and unload the machine. Ensure loading ramps are strong enough to support the load. When using ramps, do not exceed a 15 degree incline.



Loading and unloading of any type of machine is dangerous. Never attempt to load or unload the machine without loading ramps or a loading dock. Loading ramps must be strong enough, have a low angle, and correct height. Load and unload the machine on a level surface. Never attempt to load or unload the machine if the ramp incline exceeds 15 degrees. Failure to follow these instructions may result in serious injury or death.

2. Ensure the wheels of the trailer and the tow vehicle have been chocked front and rear.
3. Use the "SLOW" throttle setting when loading or unloading.
4. Drive the machine onto the trailer backwards (engine first). This will help prevent instability and keeps the operator "up hill" from the machine during loading and unloading.
5. After loading, place chocks at the front and rear of the tracks.

TRANSPORTING

1. Read the instructions for loading and unloading in this section.
2. Use chains and binders to secure the load to the trailer.

ROUTINE MAINTENANCE

Good maintenance practices will keep the machine on the job and increase its service life.

A very important maintenance practice is to keep the hydraulic fluid clean at all times. Contaminated hydraulic fluid causes rapid wear and/or failure of internal parts.

Follow the maintenance instructions contained in the engine manual.

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

Observe the following for maximum performance and service life from the hydraulic system.

- Always keep hydraulic system and fluids clean.
- Keep water out of fluid. (See paragraph b. below.)
- Keep air out of hydraulic lines. Hydraulic system overheating and foam at the hydraulic tank breather indicate air is present in the lines. Keep all suction line fittings and clamps tight.
- Hydraulic system wear is noted by increased heat during tool operation, reduced tool performance and eventual system breakdown.
- Operate with the fluid temperature at 50 - 140 F/10 - 60 C for improved seal and hose life, and maximum efficiency.

a. Filling The Reservoir

Make sure the engine is stopped before opening the filler cap. Fill slowly with the recommended fluid. Add fluid as needed. Secure the filler cap before restarting the engine. Refer to page # 8 (hydraulic fluid) section for determining correct fluid level.

b. Removing Condensed Moisture From Hydraulic Fluid

Condensation is a frequent problem with cool mobile hydraulic circuits. This condition occurs in moist or cold climates. When warm air in the hydraulic tank draws moisture from the cooler air outside, water accumulates in the tank.

- 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.
- Check hydraulic lines and fittings for leaks, kinks, etc. daily. 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.

c. Checking Suction Hose

Make sure the suction hose (from the hydraulic tank to the pump inlet) is not kinked and is clamped securely. This reduces the risk of pump cavitation and sucking air into the system. All pump fittings should be tight.

d. Checking Hydraulic Lines and Fittings

Check for loose fittings, leaks, etc., throughout the hydraulic circuit.

Hydraulic Fluid Recommendations

Viscosity (Fluid Thickness)

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

PourPoint -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 at startup, allow moisture to settle out and resist biological growth that may occur in cool operating hydraulic circuits. These fluids are recommended by Stanley Hydraulic Tools. 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

TROUBLE SHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem.

listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic oil temperature at least 80°F/27°C.

When diagnosing faults in operation of the machine or tool, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure as

Machine will not start	Fuel filter plugged	Replace fuel filter
	Defective spark plugs.	Remove plugs, check gap, clean or replace
	Tool circuit switch is on	Push tool circuit switch off
	Tool circuit lever(s) are "ON"	Move tool circuit levers to "OFF"
Machine will not move when track controls are pushed	Tool circuit switch is "ON"	Push tool circuit switch "OFF"
	Not enough throttle	Increase throttle setting
Machine stalls when track controls are pushed	Heavy load	Increase throttle setting
Hydraulic tool will not operate	Tool circuit switch is "OFF"	Push tool circuit switch "ON"
	Tool circuit lever(s) are down	Move tool circuit lever(s) up
	Not enough throttle	Move throttle to FAST position
	Incorrect tool/hose connection	Check for correct connections
	Quick disconnect fittings defective	Detach tool from hose, connect hoses together, check for free flow
	Relief valve defective	Have unit serviced by authorized technician
	Hydraulic fluid low	Add recommended fluid
Machine cannot be moved using hydraulic controls	Defective gear box(es)	Disengage gear boxes to move machine
	One or more defective hydraulic component	Disengage gear boxes to move machine

TO ENGAGE OR DISENGAGE GEAR BOXES

Note:

On the exterior of each gearbox is a round knob. Behind the knob is a detent pin. Each track gear box can be disengaged by pulling the detent pin out, and at the same time, pulling the round knob out. To engage the gearbox, pull the detent pin, and at the same time, push the round knob in. It may be necessary to rock the machine back and forth to disengage or engage each gear box.

When the gearboxes are disengaged, the machine may be moved by pushing or pulling (hydraulics and controls are no longer valid).

SPECIFICATIONS

Engine (model MHP11111000)	18 hp Briggs & Stratton
(model MHP12211000)	20 h.p. Honda
Fuel Capacity	9 qt/8.5 ltr
Fuel Type	Unleaded Gasoline w/ 85 Octane Minimum
Pressure Range	2000 psi/140 bar
Flow Range (model MHP11111000)	8 gpm/30 lpm
(model MHP12211000)	10 gpm/38 lpm
Couplers	HTMA/EHTMA Flush Face Type Male & Female
Connect Size and Type	3/8 in. Male Pipe Adapter
Weight	1300 lb/590 kg
Maximum Pay Load	1000 lb/454 kg
Overall Length	82 in. / 208 cm
Overall Width	32 in. / 81 cm
Overall Height	43 in. / 109 cm
Oil Capacity.....	4.5 Gallon

FILTERS

TRACK HORSE MODEL	ENGINE			HYDRAULIC OIL FILTER	COMMENTS
	OIL FILTER	AIR FILTER	FUEL FILTER		
MHP11111000	18384	18382	47435	40463	B&S
MHP12211000	40458	40459	47435	40463	HONDA

KEYS

Seal Kit for Lift Cylinder	39220
Ignition Key	39221 CIAM Key (CAMISA)
Ignition Key	02193 Indak Key Set (Briggs switch)

ACCESSORIES

DESCRIPTION	PART NUMBER
Coupler Nose, 3/8 Port, Bruning	03972
Coupler Body, 3/8 Port, Bruning	03973
Coupler Set, 3/8 Port , Bruning (includes nose & body)	03971
Coupler Nose, 3/8 Port	24059
Coupler Body, 3/8 Port	24058
Coupler Set, 3/8 Port, (includes nose & body)	24069
Coupler Nose, 1/2 Port, Bruning	03975
Coupler Body, 1/2 Port, Bruning	03976
Coupler Set, 1/2 Port, Bruning (includes nose & body)	03974
Coupler Nose, 1/2 Port	24061
Coupler Body, 1/2 Port	24060
Coupler Set, 1/2 Port, (includes nose & body)	24070
Exhaust Manifold for MHP12211000 after S/N 125 (Honda)	56563
Exhaust Manifold Gasket for MHP12211000 after S/N 125 (Honda)	56564
Hose Assy, 50 ft., with couplers	31848
Hose Assy, 25 ft., with couplers	31972
Demolition Tub Kit (Includes: 41854 Demolition Tub, 48756 Hardware Kit, and 48757 Instruction Sheet)	48755
Briggs & Stratton Recoil Starter Kit	24917

TRACHORSE PARTS LIST

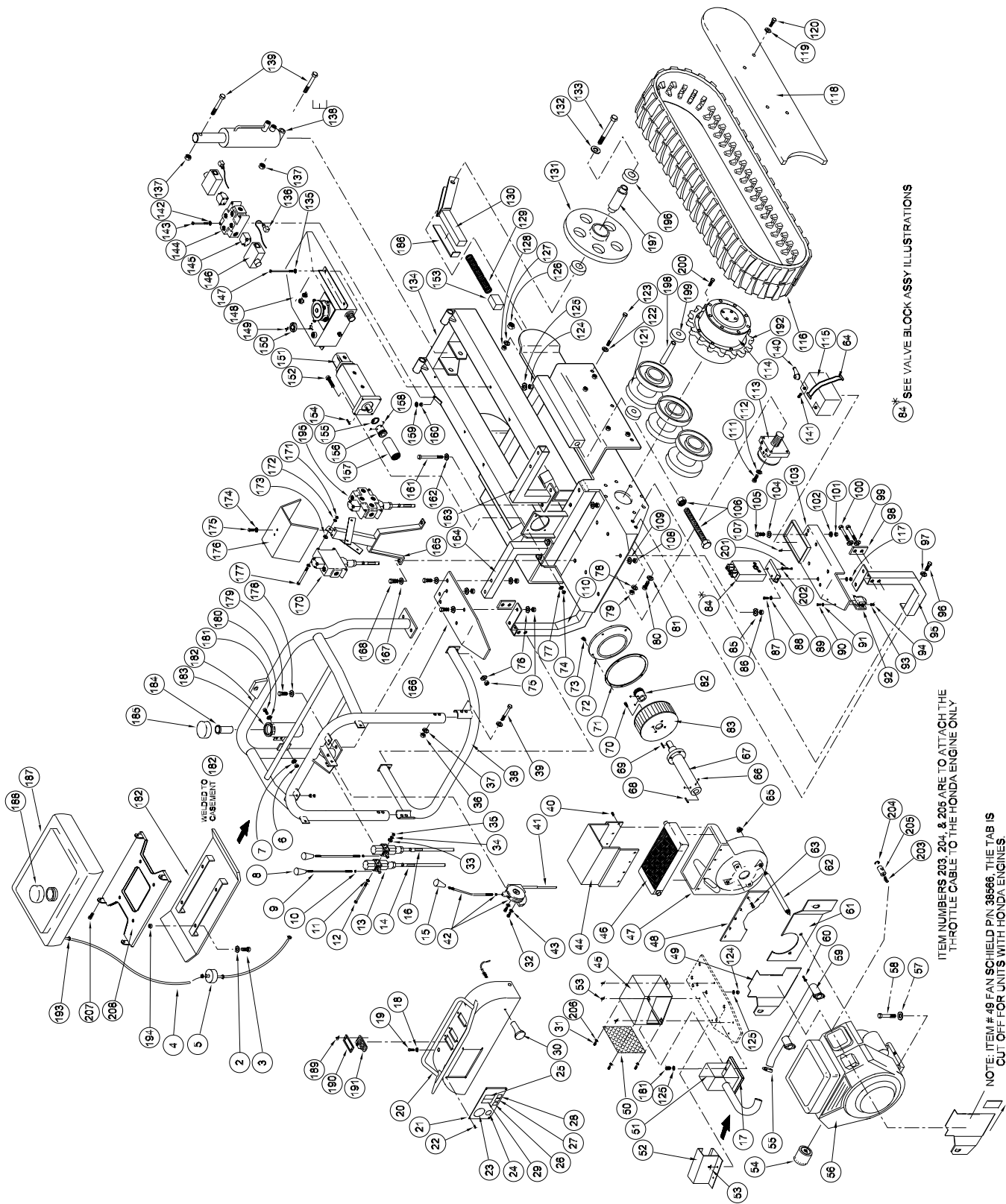
ITEM	P/N	QTY	DESCRIPTION
2	39200	4	Flat Washer, -8 mm
3	39208	4	Capscrew, 8x1x20 mm
4	39090	1	Fuel Hose
5	39089	1	Fuel Cock
6	39195	2	Lock Nut, -8x1 mm
7	39200	2	Flat Washer, -8 mm
8	60925	2	Knob
9	39088	2	Steering Levers
10	39195	2	Lock Nut, -8x1 mm
11	39201	4	Flat Washer, -6 mm
12	39211	2	Capscrew, -6x1x110 mm
13	39087	2	Remote Control
14	38493	1	Cable, Left, 1500 mm
15	38569	1	Knob
16	38492	1	Cable Right 1250mm
17	-----	--	Part Of Item 45
18	39200	4	Flat Washer, -8 mm
19	39207	4	Capscrew, -8x1x25 mm
20	38556	1	Dashboard
21	39084	1	Panel
22	39190	4	Screw, Self Tapping, 3 mm
23	20606	1	Hour Meter
24	39093	1	Ignition Switch
25	58619	1	Switch, Control Block
26	58620	1	Warning Light
27	58621	1	Warning Light
28	58622	1	Warning Light (Hydrau
29	58623	1	Switch, Tipping Bed
30	38553	1	Choke Cable Assy
31	39190	4	Screw, Self Tapping, 3 mm
32	39208	2	Capscrew, -8x1x20 mm
33	39200	2	Flat Washer, -8 mm
34	39201	2	Flat Washer, -6 mm
35	39196	2	Lock Nut, -6x1 mm
36	39199	4	Lock Nut, -10x1.5 mm
37	39204	12	Flat Washer, -10 mm
38	38562	1	Engine Shelter
39	39214	4	Capscrew, -10x1.5x70 mm
40	08668	5	Sheet Metal Screw
41	38552	1	Throttle Cable
42	38551	1	Throttle Control
43	39192	2	Nut, -8x1 mm
44	36858	1	Cooler Cover
45	38572	1	Muffler Shield
46	40078	1	Oil Cooler
47	07783	1	Blower Housing
48	38634	1	Cooler Shield
49	38566	1	Fan Shield
50	39083	1	Muffler Grille
51	38571	1	Muffler
52	39186	1	Exhaust Shield
53	39190	2	Screw, Self Tapping, 3 mm
54	18384	1	Oil Filter (B & S Engine)
54	40458	1	Oil Filter (Honda Engine)
55	39082	1	Clamp
56	27645	1	Engine (B & S)
56	36918	1	Engine (Honda)
57	39204	4	Flat Washer, -10 mm

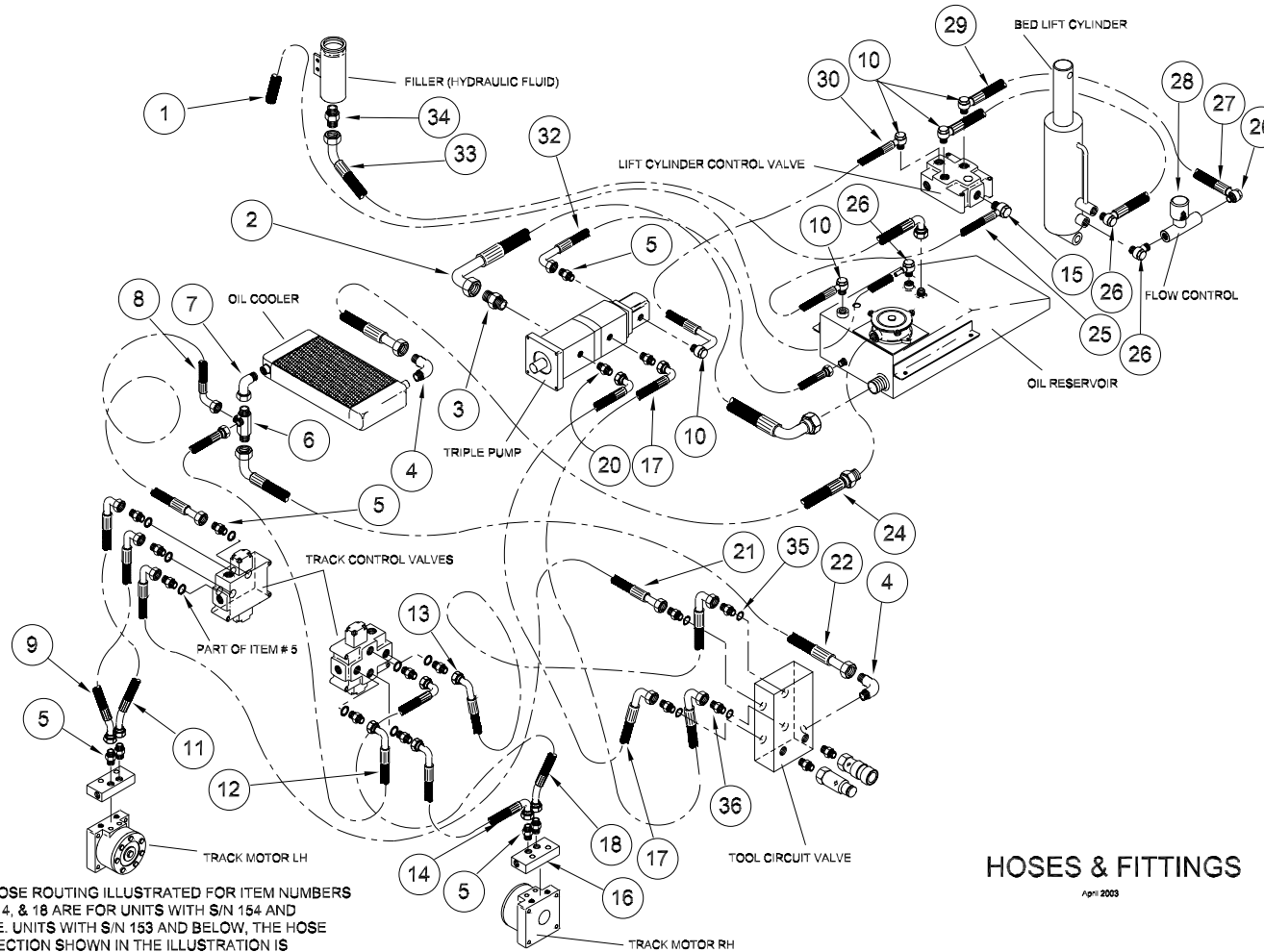
ITEM	P/N	QTY	DESCRIPTION
58	58878	4	Capscrew (Honda Engine)
	39206	4	Capscrew (B & S Engine)
59	39092	1	Exhaust Manifold (B & S Engine)
59	38570	1	Exhaust Manifold (Honda engine)
			used on units S/N 124 & below.
59	56563	1	Exhaust Manifold (Honda engine)
			used on units S/N 125 & above.
--	56564	2	Exhaust Manifold Gasket (Honda engine) S/N 125 & above.
--	58624	2	Exhaust Manifold Gasket (B & S Engine).
60	-----	--	Obtain through engine manuf.
61	39081	1	Fan Plate Shield
62	23778	4	Standoff
63	08668	5	Sheet Metal Screw
64	58627	1	Battery Strap
65	31242	4	Locknut
66	22674	2	Setscrew
67	23781	1	Blower Hub & Shaft Extension
68	07818	1	Key
69	07819	1	Key
70	00899	4	Capscrew
71	08669	1	Inlet Ring Gasket
72	07809	1	Inlet Ring
73	08667	5	Self Tapping Screw
74	39195	4	Lock Nut, -8x1 mm
75	39199	4	Lock Nut, -10x1.5 mm
76	39204	2	Flat Washer, -10 mm
77	39200	4	Flat Washer, -8 mm
78	39204	2	Flat Washer, -10 mm
79	39199	2	Lock Nut, -10x1.5 mm
80	39215	2	Capscrew, -10x1.5x30 mm
81	39204	2	Flat Washer, -10 mm
82	NSS	1	Spline (Included with item 156 coupler assembly P/N 58519)
83	08035	1	Blower Wheel
84	35402	1	Control Block Assy (B & S Engine)
84	35349	1	Control Block Assy(Honda Engine)
85	39204	4	Flat Washer, -10 mm (Honda Eng.)
	39200	4	Flat Washer, -8 mm (B&S Engine)
86	39199	4	Lock Nut,-10x1.5 mm(Honda Eng)
	39195	4	Lock Nut 8 mm (B & S Engine)
87	39208	4	Capscrew, -8x1x20mm
88	39200	4	Flat Washer, -8 mm
89	38565	1	Control Block Support
90	39191	2	Screw, -5x1x20 mm
91	39202	2	Flat Washer, -5 mm
92	39094	1	Solenoid
93	39202	2	Flat Washer, -5 mm
94	39193	2	Nut, 5x1 mm
95	38560	1	Footboard, Right Rear
96	39215	2	Capscrew, -10x1.5x30 mm
97	39204	2	Flat Washer, -10 mm
98	39080	2	Stiffening Plate
99	39204	4	Flat Washer, -10 mm
100	39213	4	Capscrew, -10x1.5x90 mm
101	39199	4	Lock Nut, -10x1.5 mm
102	39204	4	Flat Washer, -10 mm

ITEM	P/N	QTY	DESCRIPTION
103	38563	1	Footboard Bracket, Right
104	39204	3	Flat Washer, -10 mm
105	39214	3	Capscrew, -10x1.5x70 mm
106	39095	2	Track Tension Bolt & Nut
107	39189	1	Screw, Self Tapping, 4 mm
108	39199	4	Lock Nut, -10x1.5 mm
109	39204	4	Flat Washer, -10 mm
111	39215	8	Capscrew, -10x1.5x30 mm
112	39194	8	Lock Washer, -10 mm
113	39079	2	Hyd. Motor
114	38391	2	Gear Box (S/N 153 and Below) With Locking Hub
	58626	2	Gear Box (S/N 154 and Above) Without Locking Hub
115	39187	1	Battery
116	38388	2	Rubber Track
117	39195	1	Lock Nut 8mm
118	38568	2	Track Guard
119	39204	8	Flat Washer, -10 mm
120	39216	8	Capscrew, -10x1.5x20 mm
121	38486	6	Idler Wheel
122	39198	6	Lock Nut, -14x2 mm
123	38393	6	Capscrew
124	39195	5	Lock Nut, -8x1 mm
125	39200	6	Flat Washer, -8 mm
126	39197	2	Lock Nut, -16x2 mm
127	39204	2	Flat Washer, -10 mm
128	39216	2	Capscrew, -10x1.5x20 mm
129	38488	2	Spring
130	38487	2	Wheel Fork
131	38389	2	Guide Wheel
132	39203	2	Flat Washer, -16 mm
133	39212	2	Capscrew, -16x2x140 mm
134	38489	1	Frame
135	39200	4	Flat Washer, -8 mm
136		3	Connector
137	39198	2	Lock Nut, -14x2 mm
138	38495	1	Cylinder, Dump
139	38395	2	Capscrew, -14x2 mm
140	58356	1	Terminal Boot (Red)
141	14903	2	HHCS 1/4-20 (Remove 1/4-20 bolt that is furnished with battery and replace with P/N 14903
142	39200	2	Flat Washer, -8 mm
143	39210	2	Capscrew, -6x1x60 mm
144	38494	1	Control Valve, Includ items 136, 145, 146) (s/n 32 & below)
	58625	1	Control Valve, Includ items 136, 145, 146) (S/N 33 and above)
145	NSS	2	Cube Assy (Galtech) Included in control valve, Item 144.
146	39074	2	Magnetic Coil Assy (Galtech)
147	39209	4	Capscrew, -8x1x120 mm
148	38490	1	Reservoir
149	39190	3	Screw, Self Tapping, 3 mm
150	38547	1	Level Probe
151	38491	1	Triple Pump
152	39206	4	Capscrew, -8x1x50 mm
153		2	Spring Lock
154		1	Key
155	NSS	1	Retaining Ring (includ w/item 156)

ITEM	P/N	QTY	DESCRIPTION
156	58519	1	Coupling Assy (Includ items 155- 158 and 82)
157	NSS	1	Coupling Sleeve (Includ w/item 156)
158	NSS	2	Set Screw (includ w/item 156)
159	39200	4	Flat Washer, -8 mm
160	39195	4	Lock Nut, -8x1 mm
161	39215	4	Capscrew, -10x1.5x30 mm
162	39204	4	Flat Washer, -10 mm
163	38558	1	Footboard Holding Bracket, Right Front
164	38559	1	Footboard Holding Bracket, Left Front
165	38584	1	Valve Bracket
166	38561	1	Footboard, Left Rear
166	39077	1	Left Foot Board
167	39204	2	Flat Washer, -10 mm
168	39215	2	Capscrew, -10x1.5x30 mm
170	38392	1	Control Valve w/Cable S/N 153 and Below.
	60747	1	Control Valve w/Cable S/N 154 and Above.
171	39195	4	Lock Nut, -8x1 mm
172	39200	4	Flat Washer, -8 mm
173	39200	1	Flat Washer, -8 mm
174	39204	2	Flat Washer, -10 mm
175	39216	2	Capscrew, -10x1.5x20 mm
176	39078	1	Cover
177	39205	4	Capscrew, -8x1x60 mm
178	39204	4	Flat Washer, -10 mm
179	39215	4	Capscrew, -10x1.5x30 mm
180	39200	2	Flat Washer, -8 mm
181	39207	3	Capscrew, -8x1x25 mm
182	38557	1	Cage
183	38548	1	Filler
184	39188	1	Strainer
185	39184	1	Cap
186	38568	2	Inside Wheel Guard
187	37969	1	9 quart Fuel Tank
188	07810	1	Cap
189	39190	4	Screw, Self Tapping, 3 mm
190	39076	3	Boot Retainer
191	38549	3	Boot
192	38390	2	Drive Wheel
193	04317	4	Clamp (fuel hose)
194	39195	4	Lock Nut, -8x1 mm
195	38392	1	Control Valve w/Cable S/N 153 and Below.
	60747	1	Control Valve w/Cable S/N 154 and Above.
196	38396	4	Bearing
197	39091	2	Spacer
198	39185	6	Spacer
199	38485	12	Bushing
200	38394	16	Capscrew
201	00769	2	1/4-20 x 3/4 HSHCS
202	01298	2	Lock Washer
203	58491	1	Pan Hd Screw (Honda Eng only)
204	58490	1	SirClip (Honda Engine Only)
205	58492	1	Wire Holder (Honda Eng Only)
206	03014	4	Washer
207	37971	4	Shoulder Screw
208	37970	1	Fuel Tank Bracket
----	38554	1	Wiring Harness

NSS (Not Sold Separately)



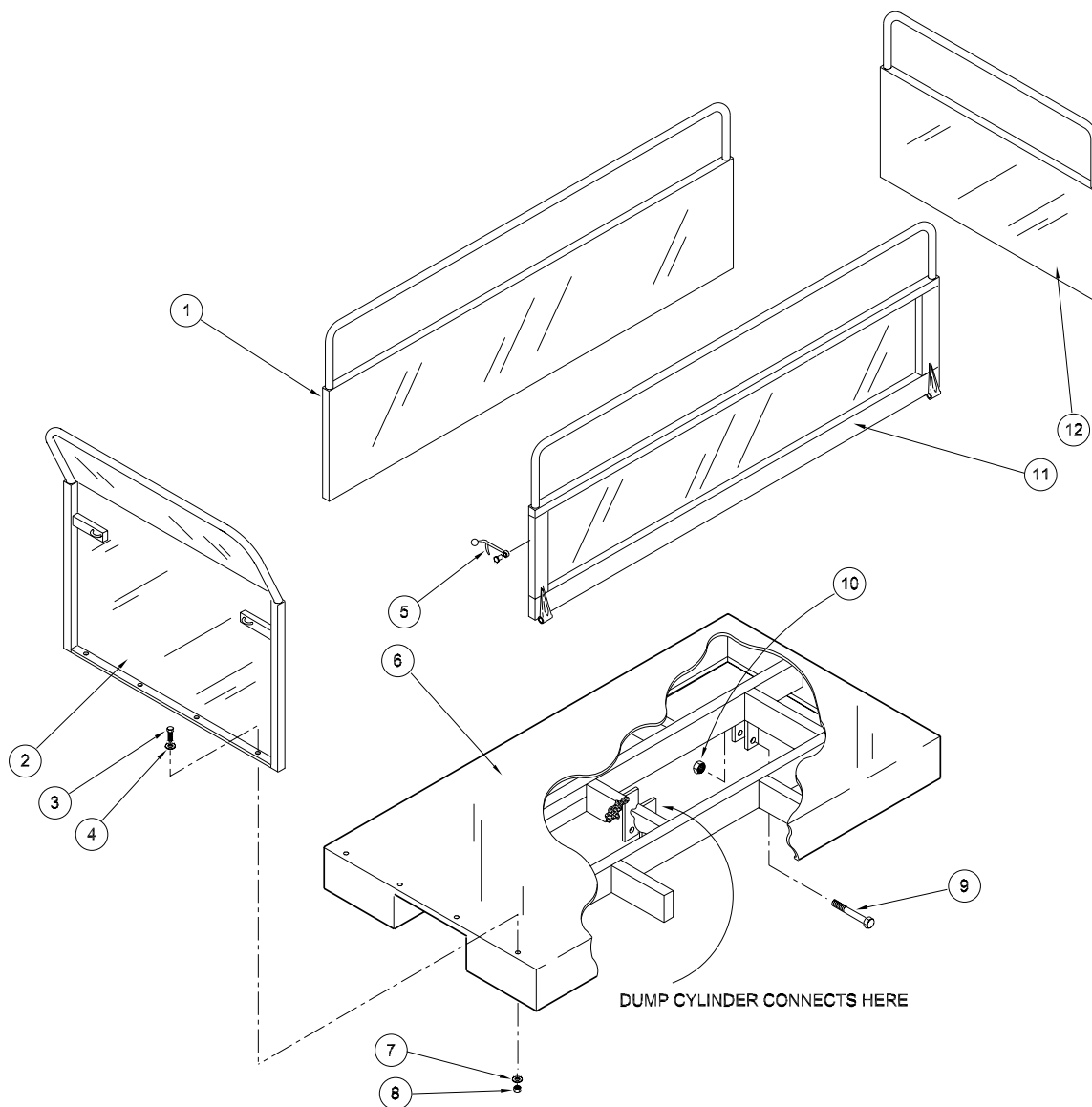


THE HOSE ROUTING ILLUSTRATED FOR ITEM NUMBERS 9, 11, 14, & 18 ARE FOR UNITS WITH S/N 154 AND ABOVE. UNITS WITH S/N 153 AND BELOW, THE HOSE CONNECTION SHOWN IN THE ILLUSTRATION IS REVERSED FROM WHAT IS ILLUSTRATED AT THE TRACK CONTROL VALVE END ONLY.

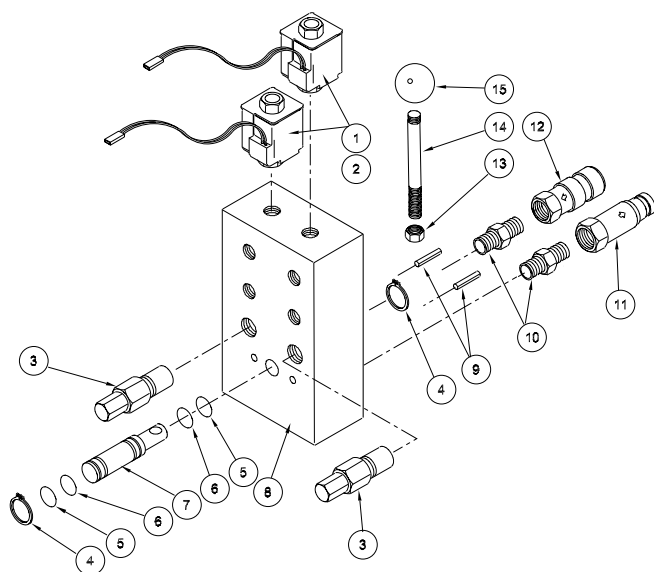
HOSES & FITTINGS

1/2" 2003

ITEM	P/N	QTY	DESCRIPTION
1		1	HOSE ASSY
2	38530	1	HOSE ASSY
3	38542	1	NIPPLE, 1 IN. X 3/4 IN.
4	38498	2	ELBOW, 90°
5	38536	15	NIPPLE, 3/8 IN. X 3/8 IN.
6	39218	1	MODIFIED FITTING
7	38499	1	ADAPTOR, 90°
8	38526	1	HOSE ASSY
9	38520	1	HOSE ASSY
10	38538	6	HOLLOW BOLT, 3/8 IN.
11	38522	1	HOSE ASSY
12	38525	1	HOSE ASSY
13	38524	1	HOSE ASSY
14	38518	1	HOSE ASSY
15		1	HOLLOW BOLT, 1/2 IN.
16	38392	2	PORTING BLOCK
17	38505	2	HOSE ASSY
18	38515	1	HOSE ASSY
19	—		NO ITEM
20	38537	2	NIPPLE
21	38523	1	HOSE ASSY
22	38513	1	HOSE ASSY
23	—		NO ITEM
24	38535	1	HOSE ASSY
25	38531	1	HOSE ASSY, S/N 32 & DOWN
		1	HOSE ASSY, S/N 33 & UP
26	38539	2	HOLLOW BOLT, 1/4 IN.
27	38533	1	HOSE ASSY, S/N 32 & DOWN
	38533	1	HOSE ASSY, S/N 33 AND UP
28	38546	1	IN-LINE FLOW CONTROL
29	38532	1	HOSE ASSY, S/N 32 & DOWN
	39223	1	HOSE ASSY, S/N 33 & UP
30	38534	1	HOSE ASSY, S/N 32 & DOWN
	38534	1	HOSE ASSY, S/N 33 & UP
31	—		NO ITEM
32	38528	1	HOSE ASSY
33	39219		HOSE ASSY
34	N/A	1	NIPPLE (INCLUDED WITH FILLER (ITEM 183)
35	01605	4	O-ring
36	38496	4	Nipple



ITEM	P/N	QTY	DESCRIPTION
1	38574	1	Side Panel
2	38576	1	Front Panel
3		4	Capscrew
4		4	Washer
5		4	Latch
6	38573	1	Bed
7		4	Washer
8		4	Nut
9		2	Capscrew
10		2	Nut
11	38574	1	Side Panel
12	38575	1	Back Panel



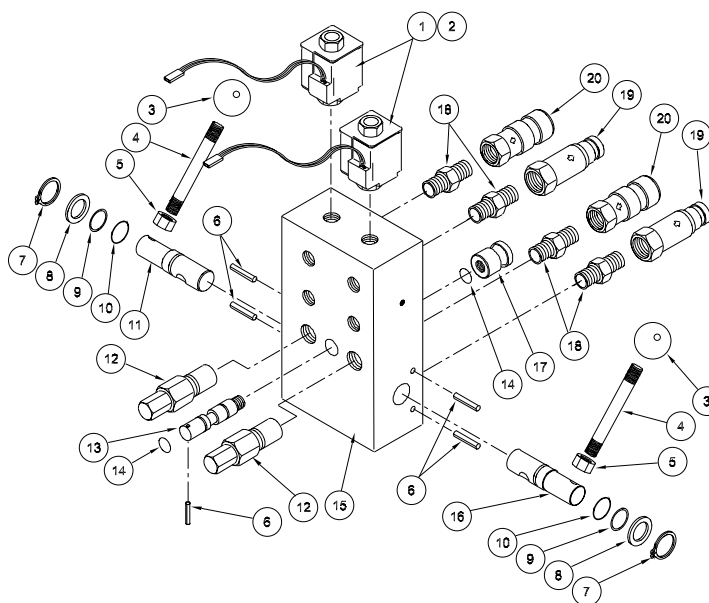
ITEM	P/N	QTY	DESCRIPTION
1	35401	2	Solenoid
2	35400	2	3-Way Cartridge Valve
3	05043	2	Relief Cartridge
4	07820	2	Retaining Ring
5	21307	2	Backup Ring
6	19095	2	O-ring
7	35029	1	ON/OFF Spool
8	34192	1	Valve Body
9	05965	2	Spirol Pin
10	00936	2	Adaptor
11	03973	1	Male Coupler
12	03972	1	Female Coupler
13	03276	1	Nut
14	05849	1	Rod
15	02633	1	Knob

Single Circuit Valve Assembly — Model MHP11111000 with Briggs & Stratton Engine

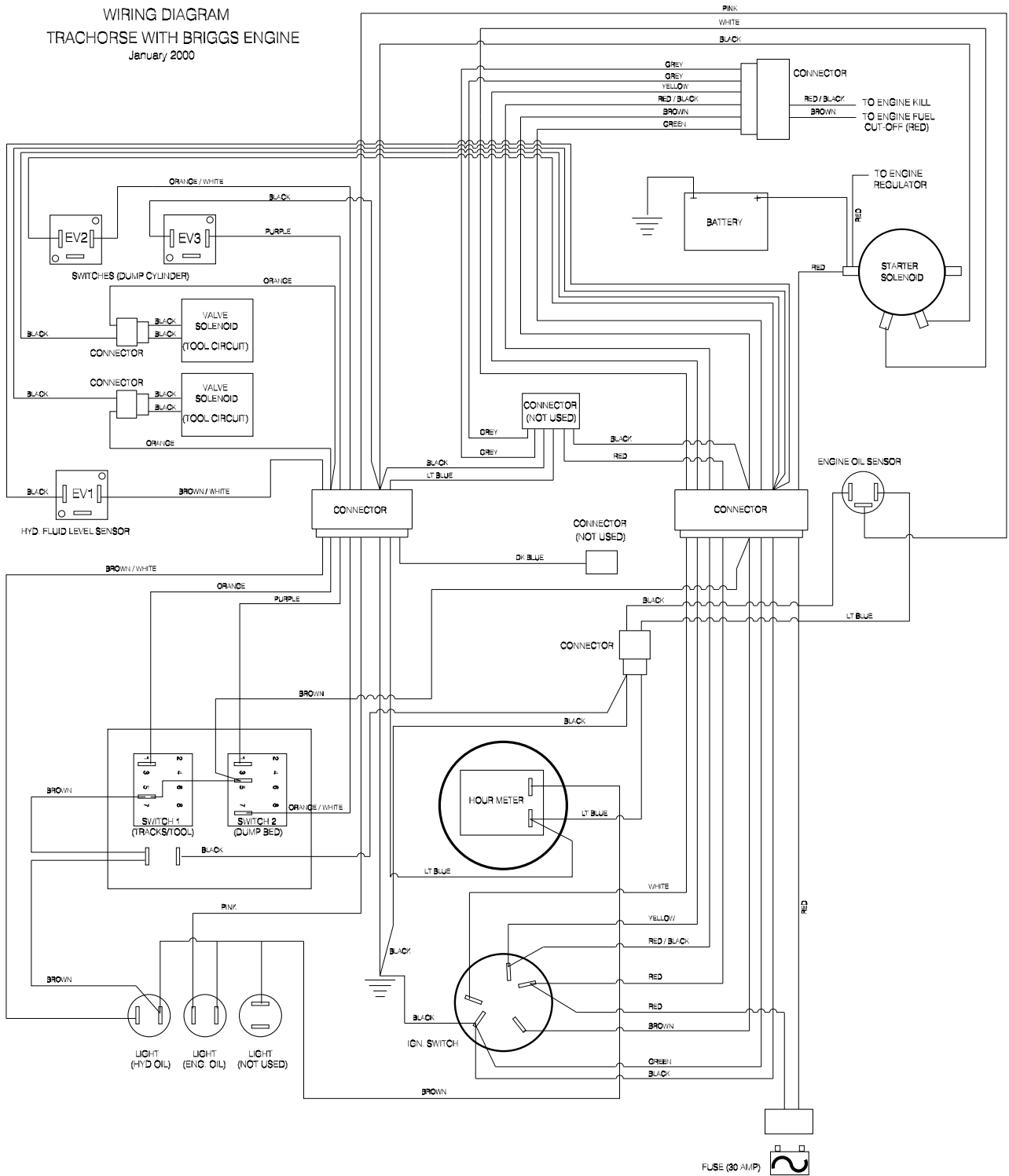
Valve Assembly Illustrations

Dual Circuit Valve Assembly — Model MHP11211000 with Honda Engine

ITEM	P/N	QTY	DESCRIPTION
1	35401	2	Solenoid
2	35400	2	3-Way Cartridge Valve
3	02633	2	Knob
4	05849	2	Rod
5	03276	2	Nut
6	21253	5	Spirol Pin
7	04314	2	Retaining Ring
8	04216	2	Washer
9	06988	2	Backup Ring
10	06989	2	O-ring
11	05844	1	ON/OFF Spool, L.H.
12	05043	2	Relief Cartridge
13	34129	1	Spool, Combiner
14	00016	2	O-ring
15	34128	1	Valve Block
16	05843	1	ON/OFF Spool, R.H.
17	05847	1	Knob, Combiner
18	00936	4	Adaptor
19	03973	2	Male Coupler
20	03972	2	Female Coupler



WIRING DIAGRAM
TRACHORSE WITH BRIGGS ENGINE
January 2000



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 Milwaukee, 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 manner 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.