STANLEY. Infrastructure

GT & HP Power Unit Technical Bulletin

12/2019 Ver. 1

What has changed?

For all non-diesel models of GT and HP Power Units, a shipping cap will be installed over the breather valve of the hydraulic oil tank.



This shipping cap and attached warning tag must be removed before using the power unit. Failure to remove this cap may cause catastrophic power unit damage.

CAUTION

Pump damage can occur if action is not taken! Remove the attached shipping cap and tag before using this power unit. Failure to remove the shipping cap could cause catastrophic damage.

Why has the change taken place?

During shipping, it is possible for hydraulic oil to escape the hydraulic oil reservoir through the breather valve. In order to eliminate hydraulic oil spillage, STANLEY will install a cap over the breather valve before the power unit is shipped.

How to Remove the Shipping Cap

- Unpack the power unit.
- 2. Locate the shipping cap installed over the breather valve.

Note: The shipping cap will be connected to a large information tag.





3. Grasp the base of the cap, pull it off of the breather valve and discard it.

Note: If your power unit breather valve does not have a cap installed, you may use the power unit normally.

STANLEY

HP210 HYDRAULIC POWER UNIT

(HP210BA, HP210B, HP210BK, **HP210BBA, HP210BY)**



USER MANUAL Safety, Operation and Maintenance









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DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY ÜBEREINSTIMMUNGS-ERKLARUNG **DECLARATION DE CONFORMITE CEE DECLARACION DE CONFORMIDAD DICHIARAZIONE DI CONFORMITA**

STANLEY. Infrastructure

I, the undersigned: Ich, der Unterzeichnende: Je soussigné: El abajo firmante:

lo sottoscritto:

Categoria:

3.

Surname and First names/Familiennname und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome

hereby declare that the equipment specified hereunder: bestätige hiermit, daß erklaren Produkt genannten Werk oder Gerät: déclare que l'équipement visé ci-dessous: Por la presente declaro que el equipo se especifica a continuación: Dichiaro che le apparecchiature specificate di seguito:

1.	Category:	Hydraulic Power Unit
	Kategorie:	•
	Catégorie:	
	Categoria:	

Make/Marke/Marque/Marca/Marca

Type/Typ/Type/Tipo/Tipo:

Serial number of equipment: Seriennummer des Geräts: Numéro de série de l'équipement: Numero de serie del equipo: Matricola dell'attrezzatura:

HP210BA, HP210BBA, HP210BP

All

Stanley

Vervier, Patrick

Has been manufactured in conformity with Wurde hergestellt in Übereinstimmung mit Est fabriqué conformément Ha sido fabricado de acuerdo con E' stata costruita in conformitá con

Directive/Standards Richtlinie/Standards Directives/Normes Directriz/Los Normas Direttiva/Norme	No. Nr Numéro No n.	Approved body Prüfung durch Organisme agréé Aprobado Collaudato
EN ISO	12100:2010	Self
Noise Directive ISO Machinery Directive	2000/14/EC:2005 3744:2010 2006/42/EC:2006	TUV Rheinland (Notified body ID 0197) Tillystraße 2, 90431 Nürnberg, Germany Certificate #JO601591400001 (Verification 09/11/2021) Valid: 8/11/2026 Self

6.	Special Provisions: None	7.	Measurements:	Measured Sound Power Level 99 LwA
	Spezielle Bestimmungen:		Messungen	Guaranteed Sound Power Level 101 LwA
	Dispositions particulières:		Mesures	Measured in accordance to Directive 2000/14/E0
	Provisiones especiales:		Mediciones	Noise related value: Installed Power 13,4 kW
	Disposizioni speciali:		Misurazioni	

Representative in the Union: Patrick Vervier, STANLEY Dubuis 17-19, rue Jules Berthonneau- CS 73406 41034 Blois CEDEX, France. Vertreter in der Union/Représentant dans l'union/Representante en la Union/Rappresentante presso l'Unione

Done at/Ort/Fait à/Dado en/Fatto a STANLEY Infrastructure, Milwaukie, Oregon USA Date/Datum	m/le/Fecha/Data	a 12/08/2022
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Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Cargo/Posizione **Engineering Manager**

STANLEY

DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY



		Vervier, Patrick
		Surname and First names
nerel	by declare that the equipment spe	cified hereunder:
1. (Category:	Hydraulic Power Unit
2.	Make:	STANLEY
3.	Туре:	HP210BA, HP210BBA, HP210BP
4.	Serial number of equipment:	All

Has been manufactured in conformity with

Directive/Standards	No.	Approved body
EN ISO	12100:2010	Self
Noise Emission in the Environment by Equipment for Use Outdoors Regulations 2001	S.I. 2001/1701	TUV Rheinland (Notified body ID 0197)
ISO	3744:2010	Tillystraße 2, 90431 Nürnberg, Germany Certificate #JO601591400001 (Verification 09/11/2021) Valid: 8/11/2026
Supply of Machinery (Safety) Regulations 2008	S.I. 2008/1597	Self

5.	Special Provisions:	None	6.	Measurements:	Measured Sound Power Level 99 LwA
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7. Representative in the Union: Patrick Vervier, STANLEY Dubuis 17-19, rue Jules Berthonneau- CS 73406 41034 Blois CEDEX, France.

Done at STANLEY Infrastructure, Milwaukie	e, Oregon l	USA Date	12/08/2022
Signature	P	2	

Position Engineering Manager

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IMPORTANT

To fill out a product warranty validation form, and for information on your warranty, visit www.stanleyinfrastructure.com and select the Company tab > Warranty.

Note: The warranty validation record must be submitted to validate the warranty.

SERVICING: This manual contains safety, operation and routine maintenance instructions. STANLEY Infrastructure recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

AWARNING

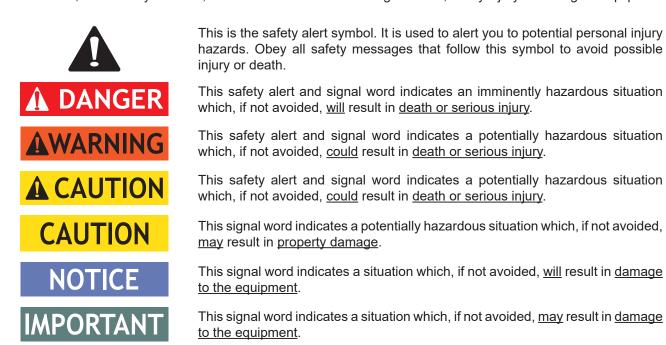
SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

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

For the nearest certified dealer, call STANLEY Infrastructure at (503) 659-5660 and ask for a Customer Service Representative.

SAFETY SYMBOLS

Safety symbols and signal words, as shown below, 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 remaintenance personnel.	gulations here.	Keep	these	instructions	in ar	n area	accessible	to the	operator	and

SAFETY PRECAUTIONS

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.

In addition to this manual, read and understand safety and operating instructions in the engine "Operation & Maintenance Instructions" manual furnished with the HP210 power unit.

The HP210 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 unit. Failure to do so could result in personal injury or equipment damage.







- Operator 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 protection, head protection and safety shoes at all times when operating the power unit.
- Do not inspect or clean the power unit while it is running. Accidental engagement of the unit can cause serious injury.
- 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.
- Be sure all hoses are connected for correct flow direction to and from the tool being used.

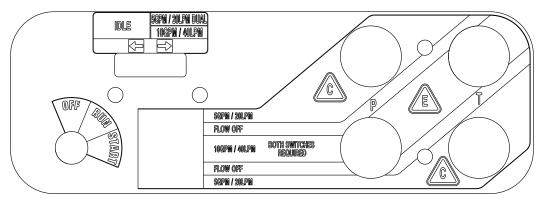
- Do not inspect hoses and fittings for leaks by using bare hands. "Pin-hole" leaks can penetrate the skin.
- NEVER OPERATE THE POWER UNIT IN A CLOSED SPACE. Inhalation of engine exhaust can be fatal.
- Do not operate a damaged or improperly adjusted power unit.
- Never wear loose clothing that can become entangled in the working parts of the power unit.
- Keep all parts of your body away from the working parts of the power unit.
- Keep clear of hot engine exhaust.
- Do not add fuel to the power unit while it 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 tool rotation direction by changing fluid flow direction.
- Allow power unit engine to cool before storing in an enclosed space.
- Always keep critical tool markings, such as labels and warning stickers, legible.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.



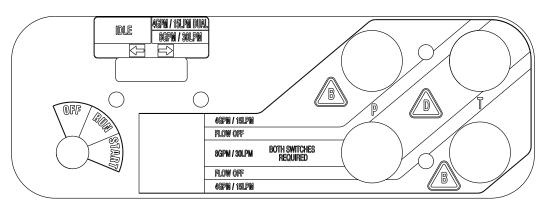
TOOL STICKERS & TAGS



74759 Power Unit Dash Decal



76759 Dual Circuit Decal (HP210B, HP210BK & HP210BY)



81163 Dual Circuit Decal (HP210BA &HP210BBA)



28323 CE Deca HP210BA HP210BBA



88724 UKCA Decal HP210BA HP210BBA

Importé par: DUBUIS SAS 17-19, RUE JULES BERTHONNEAU BP 3406 - 41034 BLOIS - CEDEX France

88344 Importer Decal HP210BA HP210BBA EMISSION CONTROL INFORMATION
STANLEY, Hydraulic Tools

84815 Emission Control Decal

STANLEY Infrastructure 3810 S.E. Naef Road Milwaukie, Oregon 97267 USA

88423 Address Decal HP210BA HP210BBA



66653 Sound Power Decal HP210BA HP210BBA



73306 Lifting Point Decal HP210BA HP210BBA

HOSE TYPES

The rated working pressure of the hydraulic hose must be equal to or higher than the relief valve setting on the hydraulic system. There are three types of hydraulic hose that meet this requirement and are authorized for use with STANLEY hydraulic tools. They are:

Certified non-conductive — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. Hose labeled **certified non-conductive** is the only hose authorized for use near electrical conductors.

Wire-braided (conductive) — constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. *This hose is conductive and must never be used near electrical conductors.*

Fabric-braided (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. This hose is **not certified non-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. 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 from your STANLEY Distributor.

THE TAG SHOWN BELOW IS ATTACHED TO "CERTIFIED NON-CONDUCTIVE" HOSE





(Shown smaller than actual size)

THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.





(Shown smaller than actual size)



HOSE RECOMMENDATIONS

Tool to Hydraulic Circuit Hose Recommendations

The chart to the right shows recommended minimum hose diameters for various hose lengths based on gallons per minute (GPM)/liters per minute (LPM). These recommendations are intended to keep return line pressure (back pressure) to a minimum acceptable level to ensure maximum tool performance.

This chart is intended to be used for hydraulic tool applications only based on STANLEY tool operating requirements and should not be used for any other applications.

All hydraulic hose must have at least a

All hydraulic hose must have at least a rated minimum working pressure equal to the maximum hydraulic system relief valve setting.

All hydraulic hose must meet or exceed specifications as set forth by SAE J517.

Oil	Oil Flow	Hose L	Hose Lengths	Inside D	Inside Diameter	USE	Min. Workin	Min. Working Pressure
GPM	LPM	FEET	METERS	INCH	MM	(Press/Return)	PSI	BAR
		Certified No	Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks	Hose - Fibe	r Braid - for	Utility Bucket	Trucks	
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
	Conductiv	ve Hose - Wire	Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS	Braid -DO	NOT USE NE	AR ELECTRIC	AL CONDUCT	ORS
4-6	15-23	up to 25	up to 7.5	3/8	10	Both	2500	175
4-6	15-23	26-100	7.5-30	1/2	13	Both	2500	175
5-10.5	19-40	up to 50	up to 15	1/2	13	Both	2500	175
5-10.5	19-40	51-100	15-30	2/8	16	Both	2500	175
7 7	0,7	000	000	2/8	16	Pressure	2500	175
0-10.5	04-8-	006-001	06-00	3/4	19	Return	2500	175
10-13	38-49	up to 50	up to 15	2/8	16	Both	2500	175
67 07	20 40	100	75 20	2/8	16	Pressure	2500	175
2-0	94-00	00-	06-61	3/4	19	Return	2500	175
07 07	20 40	100 300	30 60	3/4	19	Pressure	2500	175
21-01	94-00	002-001	00-00	_	25.4	Return	2500	175
97 07	40.60	30 04 000	0 0	8/9	16	Pressure	2500	175
0 -5	49-60	cz oj dn	o 01 dn	3/4	19	Return	2500	175
707	09 07	007	0	3/4	19	Pressure	2500	175
2-10	49-00	70-100	05-0	_	25.4	Return	2500	175

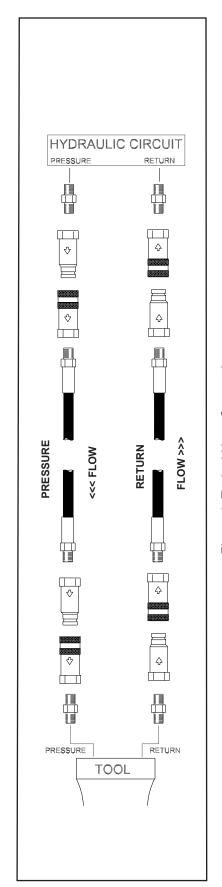


Figure 1. Typical Hose Connections

HTMA / EHTMA REQUIREMENTS

HTMA / EHTMA REQUIREMENTS

TOOL TYPE

HTMA HYDRAULIC SYSTEM REQUIREMENTS	TYPE I	TYPE II	TYPE RR	TYPE III
Flow range	4-6 GPM	7-9 GPM	9-10.5 GPM	11-13 GPM
	(15-23 LPM)	(26-34 LPM)	(34-40 LPM)	(42-49 LPM)
Nominal operating pressure (At the power supply outlet)	1500 psi	1500 psi	1500 psi	1500 psi
	(103 bar)	(103 bar)	(103 bar)	(103 bar)
System relief valve setting (At the power supply outlet)	2100-2250 psi	2100-2250 psi	2200-2300 psi	2100-2250 psi
	(145-155 bar)	(145-155 bar)	(152-159 bar)	(145-155 bar)
Maximum back pressure (At tool end of the return hose)	250 psi	250 psi	250 psi	250 psi
	(17 bar)	(17 bar)	(17 bar)	(17 bar)
Measured at a max fluid viscosity of: (At minimum operating temperature)	400 ssu*	400 ssu*	400 ssu*	400 ssu*
	(82 centistokes)	(82 centistokes)	(82 centistokes)	(82 centistokes)
Temperature: Sufficient heat rejection capacity to limit maximum fluid temperature to: (At maximum expected ambient temperature)	140° F	140° F	140° F	140° F
	(60° C)	(60° C)	(60° C)	(60° C)
Minimum cooling capacity at a temperature difference of between ambient and fluid temps	3 hp	5 hp	6 hp	7 hp
	(2.24 kW)	(3.73 kW)	(5.22 kW)	(4.47 kW)
	40° F	40° F	40° F	40° F
	(22° C)	(22° C)	(22° C)	(22° C)

Note: Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool.

Filter minimum full-flow filtration	25 microns	25 microns	25 microns	25 microns
Sized for flow of at least: (For cold temp startup and maximum dirt-holding capacity)	30 GPM	30 GPM	30 GPM	30 GPM
	(114 LPM)	(114 LPM)	(114 LPM)	(114 LPM)
Hydraulic fluid, petroleum based (premium grade, antiwear, non-conductive) Viscosity (at minimum and maximum operating temps)	100-400 ssu	100-400 ssu	100-400 ssu	100-400 ssu
	(20-82	(20-82	(20-82	(20-82
	centistokes)	centistokes)	centistokes)	centistokes)

Note: When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.

*SSU = Saybolt Seconds Universal

CLASSIFICATION

EHTMA HYDRAULIC SYSTEM REQUIREMENTS	B 15Lpm at 138bar EHIMA CATEGORY	20Lpm at 138bar EHTMA CATEGORY	30Lpm at 138bar EHTMA CATEGORY	40Lpm et 138bor EHMA CATEGORY	F SOLpm at 138bar EHINA CATEGORY
Flow range	3.5-4.3 GPM (13.5-16.5 LPM)	4.7-5.8 GPM (18-22 LPM)	7.1-8.7 GPM (27-33 LPM)	9.5-11.6 GPM (36-44 LPM)	11.8-14.5 GPM (45-55 LPM)
Nominal operating pressure (At the power supply outlet)	1870 psi	1500 psi	1500 psi	1500 psi	1500 psi
	(129 bar)	(103 bar)	(103 bar)	(103 bar)	(103 bar)
System relief valve setting (At the power supply outlet)	2495 psi	2000 psi	2000 psi	2000 psi	2000 psi
	(172 bar)	(138 bar)	(138 bar)	(138 bar)	(138 bar)

Note: These are general hydraulic system requirements. See tool specification page for tool specific requirements.



OPERATION

PREPARATION FOR USE

Do not operate HP210 until you have completed the following steps:

READ THE ENGINE "OPERATING & MAINTENANCE INSTRUCTIONS" MANUAL.

CHECK ENGINE CRANKCASE OIL LEVEL

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 & Maintenance Instructions" manual. See the "Operating & Maintenance Instructions" manual for oil viscosity grade.

CHECK ENGINE FUEL LEVEL

If fuel level is low, fill with unleaded gasoline (85 octane minimum).

CHECK HYDRAULIC FLUID

Ensure there is hydraulic fluid in the hydraulic oil tank. Below is a list of recommended oils.

Brand	Biodegradable	Description
CITGO	No	Hydurance AW32
AMS Oil	No	HVH 32
Exxon Mobil	No	Univis HVI26*
Exxon Mobil	No	DTE 10 Excel
Shell	No	S2 V 32
Chevron	No	Rando HDZ 32
Conoco Phillips	No	Unax AW-WR-32
Clarion (CITGO)	Yes	Green Bio 32
Exxon Mobil	Yes	EAL 224H
Chevron	Yes	Clarity AW32
Terresolve	Yes	Envirologic 132
Shell	Yes	Naturelle HF-E-32

^{*}Recommended for extreme cold temperatures

INSTALL HYDRAULIC CONNECTIONS

STANLEY recommends you use hose lengths of 25 ft/8 m with 1/2 inch/12.7 mm inside diameter. Hoses must have a working pressure rating of at least 2500 psi/175 bar. Hose ends must have male threads compatible with H.T.M.A.

quick disconnect fittings (NPT).

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 coupling. Additional fittings, such as reducers 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.

USING THE 12 VOLT DC OUTLET

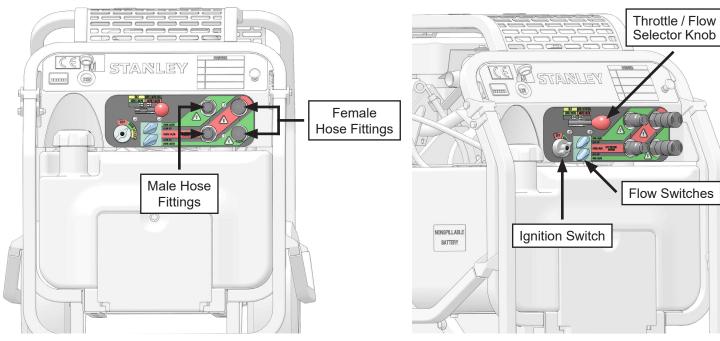
A 12 VDC outlet is available for specific models. The DC outlet is ON at all times.



Accessories left in the 12VDC outlet can drain the battery if the HP210 is not running.



OPERATION



CONTROLS

HP210 can provide two 5 GPM/20 LPM circuits (up to 2000 psi/140 bar) or one 10 GPM/40 LPM circuit (up to 2000 psi/140 bar).

HP210BA and HP210BBA CE models can provide two 4 GPM/15 LPM circuits (up to 2000 psi/140 bar) or one 8 GPM/30 LPM circuit (up to 2000 psi/140 bar).

STARTUP

Toggle both Flow Switches to the "FLOW OFF" position.

Note: HP210 will not start unless the Flow Switches are in the "FLOW OFF" position.

- 2. Pull the choke knob out
- 3. Select the desired flow using the Flow Selector Knob.
- 4. Turn the Ignition Switch to the "START" position. After the engine starts, release the switch.
- 5. Gradually push in the choke knob as the engine begins to idle smoothly.
- 6. Allow the engine to warm up.
- 7. Connect hoses and the tool.
- 8. Toggle the Flow Switches to the desired flow for each circuit.

CHANGING CIRCUIT FLOW

- Toggle the Flow Switches to the "FLOW OFF" position.
- Select the desired circuit flow using the Flow Selector Knob.
- Toggle the Flow Switches to the desired flow for each circuit.

SHUTDOWN

- Toggle the Flow Switches to the "FLOW OFF" position.
- Allow the engine to idle for approximately one minute.
- 3. Turn the Ignition Switch to the "OFF" position.

COLD WEATHER STARTUP

Hydraulic fluid becomes thicker in cold weather. STANLEY recommends that the engine be run at a low idle (5 GPM/20 LPM setting) long enough to bring the fluid temperature up to a minimum of 50°F/10°C. Allow the hydraulic fluid to circulate through the tool hoses until they are warm.

Once the hydraulic oil is warm, you may operate the HP210 as normal.

MAINTENANCE & TESTING

ENGINE MAINTENANCE SCHEDULE

Follow the maintenance instructions provided in the engine "Operating & Maintenance Instructions" manual.

HYDRAULIC SYSTEM MAINTENANCE

- Check hydraulic fluid level daily and fill if needed.
- Check hydraulic lines and fittings daily for leaks, kinks or damage. Do not use your hand to perform this check.
- Remove condensed moisture from the hydraulic fluid.
 - Set the flow selector to a 5 GPM/20 LPM circuit flow.
 - 2. Start the engine and pump the fluid, out of the pressure port, into a 5 gal. container.
 - 3. When hydraulic tank is empty, turn the Ignition Switch to the "Off" position.
 - Let the water settle to the bottom of the container.
 - Pour the hydraulic fluid back into the tank, being careful to not disturb the water sitting at the bottom of the container.
- Change the hydraulic filter every 200 hours of operation. Change more often if used in cold, moist or dusty conditions.
- Check oil cooler. Remove debris with air pressure.

BATTERY

- Do not charge the battery with an automotive battery charger. Charging at higher than 2 amps will damage the battery.
- If the engine stalls during operation, set the Ignition Switch to the "OFF" position to preserve battery charge.

STORAGE

- Clean the unit thoroughly. Do not pressure wash.
- Always store the unit in a clean and dry location.
- If storing for over 30 days, add an additive to the fuel tank to prevent the fuel from gumming. Run the engine to circulate the additive.

Replace the crankcase oil.

GENERAL

Tests should be performed periodically to ensure HP210 is operating at maximum efficiency. STANLEY Circuit Tester (part number 04182) can be used to isolate problems in both the engine and hydraulic system.

TESTING THE HYDRAULIC CIRCUIT

Test to ensure the hydraulic pump is supplying the correct flow and pressure, and that the system relief valve is operating properly. Before testing, make sure the engine is warm and operating smoothly.

- 1. Turn the Flow Switch to the "FLOW OFF" position.
- Set the Flow Selector Knob to the flow you would like to test.
- 3. Connect the STANLEY Circuit Tester to the tool hoses.
- 4. Fully open the tester restrictor valve (counterclockwise).
- 5. Start the engine.
- The test flow gauge should read +/- 1 GPM of the selected flow.
- 7. Slowly turn the restrictor valve clockwise while watching the pressure gauge. The flow rate should not change as the pressure reaches 2100-2200 psi/148-155 bar.
- 8. At 2100-2200 psi/148-155 bar, the relief valve should begin to open. The flow rate should start to drop because the relief valve is allowing fluid to bypass to the hydraulic fluid tank. The relief valve is preset at the factory. If it does not open within the above range, the relief valve must be reset as follows:
 - a. The relief valve is located on the right side of the unit, behind the dash panel (10, page 17). Use a wrench to loosen the nut on the relief valve.
 - b. Use an Allen wrench to adjust the relief valve. Turn clockwise to raise the opening pressure, and counterclockwise to reduce the opening pressure.
 - c. Tighten the nut and repeat the test.



TROUBLESHOOTING

Problem	Cause	Remedy
Engine will not start.	Flow Switch is not in the "FLOW OFF" position.	Make sure the Flow Switch is in the "FLOW OFF" position before attempting to start the power unit.
	Battery is not connected.	Check the battery cables for continuity and re-attach to the battery.
	Weak battery charge.	Test the battery voltage and charge if necessary. If the battery will not hold a charge, replace.
	No Fuel.	Ensure the power unit is cool, then add fuel.
	Fuel filter is plugged.	Replace the fuel filter.
	Defective spark plugs.	Remove the spark plugs and check the gap. Replace if necessary.
Hydraulic fluid is blowing out of the fluid reservoir vent.	Hydraulic fluid tank is overfilled.	Remove hydraulic fluid from the tank.
	Hydraulic pump is leaking.	Check the pump connections (see page 21. Tighten if necessary.
The hydraulic tool connected to the power unit will not operate.	The Flow Selector Knob is not in the proper position for the connected tool.	Ensure that the Flow Selector Knob is positioned for the correct fluid flow for your tool.
	The tool is not properly connected to the power unit.	Check the connection hoses from the power unit to the tool. Ensure the pressure and the return hoses are in the proper ports on the tool.
	The quick disconnect fittings are defective.	Disconnect the fittings from the hose and ensure there is free flow from each end of the fittings.
	The hydraulic fluid level in the reservoir is too low.	Check the fluid level in the hydraulic fluid tank. Add more fluid if necessary.
	The pump coupling is defective.	Power down the unit and check the coupling between the hydraulic pump and the engine (10, page 19).
	The relief valve is stuck open.	Adjust the valve or replace if necessary.
	Suction hoses are kinked.	Visually check the suction hose for a kink. The hose should have a smooth curve.
	The solenoid is not working.	Check electrical connections (see page 22). Replace if necessary.
	The attached tool is defective.	Refer to the tool manual.

SPECIFICATIONS

Engine:	18 hp Briggs
Capacity	Two 5 GPM/20 LPM Circuits or One 10 GPM/40 LPM Circuit
Capacity (HP210BA & HP210BBA)	Two 4 GPM/15 LPM Circuits or One 8 GPM/30 LPM Circuit
Length:	
Width:	
Height:	
Weight (Wet): Dual Circuit Briggs	
Fuel Tank Capacity:	5.5 gal. / 20.8 ltr
Estimated Gas Consumption Per Hour	1.3 gal / 4 ltr
Hydraulic Reservoir Capacity:	
Nominal Operating Pressure	1500 psi / 103 bar
Relief Valve "crack" setting	2100 psi / 145 bar
	2500 psi / 172 bar
EHTMA Category	C or E
	B or D
HTMA Category	Type 1 or Type RR

POWER UNITS, TRACHORSE & GAS/FUEL DRIVEN EQUIPMENT: A1. Federal Emission Component Compliance 40CFR part 1060.120 STANLEY warrants all fuel system emission components for 2 years from the date of original purchase provided there has been no abuse, neglect, modifications or improper maintenance.

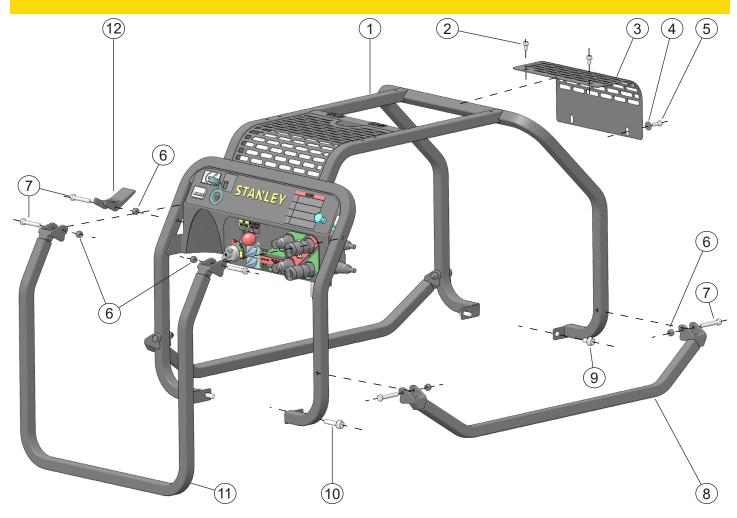
Components Covered: The emission-related warranty covers all components whose failure would increase the evaporative emissions. Your emission-related warranty does not cover components whose failure would not increase evaporative emissions. Coverage under this warranty extends only to the following parts; fuel tank, fuel cap, fuel hose and vapor hose from the fuel tank to the engine and any connectors that are apart of the fuel system.

The equipment is designed, built, and equipped so it conforms at the time of sale to the ultimate purchaser and each subsequent purchaser and is in compliance with 40 C.F.R. 1060.120 standards. The equipment is free from defects in materials and workmanship that may keep it from meeting these requirements.

ACCESSORIES

Coupler Male, 3/8 -8 SAE, Parker	58857
Coupler Female, 3/8 -8 SAE, Parker	58856
Coupler Male, 3/8 -8 SAE, Aeroquip	66785
Coupler Female, 3/8 -8 SAE, Aeroquip	66784
Hose Assy, 50 ft., with couplers (2 wire braid RR)	58448
Hose Assy, 50 ft., with couplers	31848
Hose Assy, 25 ft., with couplers	31972
Hose Assy, 25 ft., with couplers (2 wire braid RR)	58451
Wheel Kit (Converts a Skid Mount unit into a wheeled unit)	73393
Oil Filter	18384
Air Filter	18382
Fuel Filter	19947
Foam Air Filter	18383
Hydraulic Oil Filter	40408

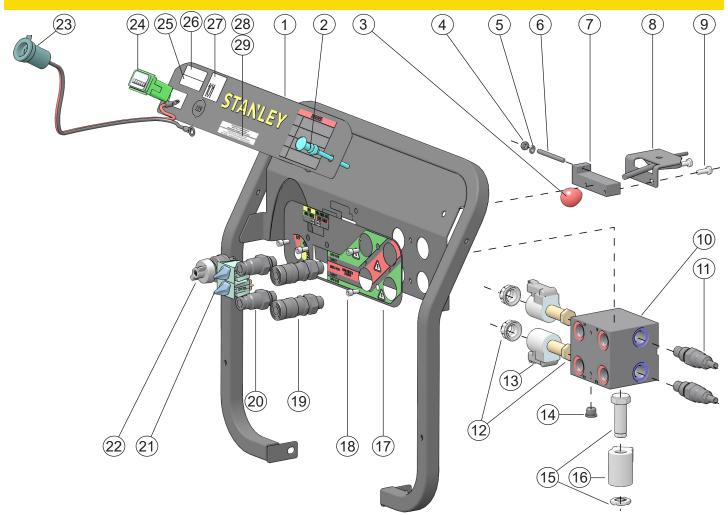
HP210 FRAME PARTS ILLUSTRATION



ITEM#	PART#	QTY	DESCRIPTION
1.	76755	1	Frame Weldment
	76712	1	Frame Weldment (HP2510B05)
2.	59074	2	Flange Bolt
3.	59079	1	Cooler Guard
4.	60945	2	Washer
5.	15476	2	Capscrew - Use if hydraulic oil tank was manufactured BEFORE 1/1/2021.
	14903	2	Capscrew - Use if power unit or hydraulic oil tank was manufactured AFTER 1/1/2021.
6.	03906	7	Nut
7.	370502	7	Capscrew
8.	62268	2	Lift Handle
	66064	2	Lift Handle (HP2510B05)
9.	23530	2	Flange Bolt

ITEM#	PART#	QTY	DESCRIPTION
10.	58976	2	Flange Bolt
11.	62267	1	Rear Lift Handle
	66063	1	Rear Lift Handle (HP2510B05)
12.	58916	1	Handle Lock

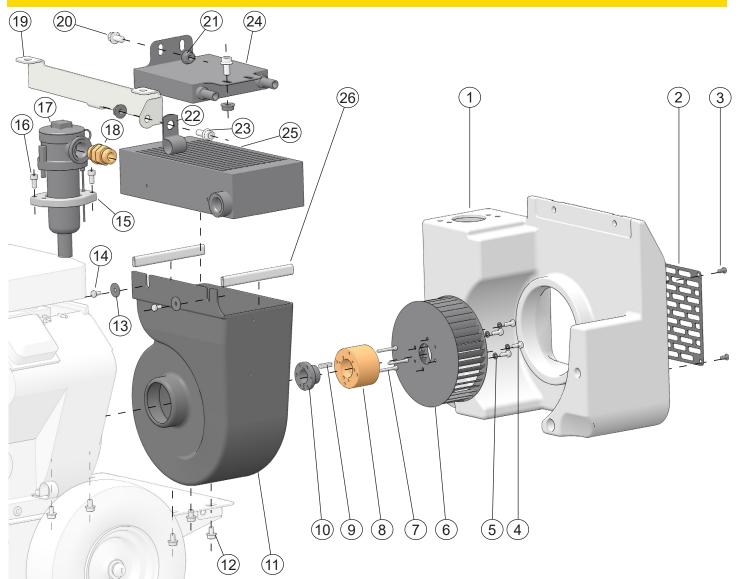
HP210 CONTROL PANEL PARTS ILLUSTRATION



			[
ITEM#	PART#	QTY	DESCRIPTION
1.	74759	1	Dash Decal
2.	62298	1	Choke Cable Assembly
3.	204332	1	Throttle Knob
4.	00038	1	Nut
5.	01324	1	Lock Washer
6.	76758	1	Throttle Rod
7.	76757	1	Throttle Stop
8.	208887	1	Throttle Cable Assembly
9.	15476	2	Capscrew
10.	79334	1	Manifold
11.	59131	2	Relief Valve
12.	62319	2	Directional Valve and Cap
13.	60958	2	Solenoid Coil
14.	08104	1	Hollow Hex Plug
15.	60960	1	Combiner Valve and Nut
16.	62320	1	Solenoid Coil
17.	76759	1	Dual Circuit Decal

ITEM#	PART#	QTY	DESCRIPTION
	81163	1	Dual Circuit Decal (HP210BBA & HP210BA)
18.	60962	4	Capscrew
19.	58856	2	3/8in. Female Coupler, -8 SAE
20.	58857	2	3/8in. Male Coupler, -8 SAE
21.	60956	2	Rotary Switch
22.	67899	1	3 Position Rotary Switch
23.	64942	1	12V Receptacle Assembly
24.	60946	1	Hour Meter
25.	88724	1	UKCA Decal (HP210BBA, HP210BA)
26.	28323	1	CE Decal (HP210BBA, HP210BA)
27.	66653	1	Sound Power Decal (HP210BBA, HP210BA)
28.	88344	1	Importer Decal (HP210BBA, HP210BA)
29.	88423	1	Address Decal (HP210BBA, HP210BA)
30.	79312	1	Wire Harness (see page 22)

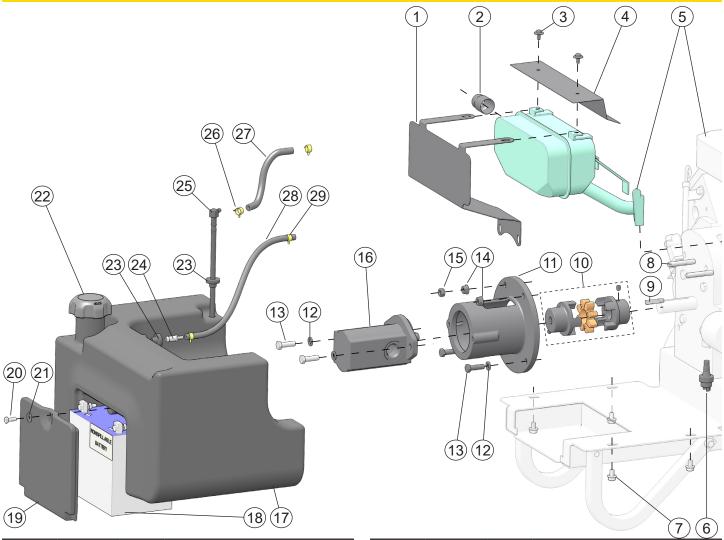
HP210 ENGINE PARTS LIST - FRONT



ITEM#	PART#	QTY	DESCRIPTION
1.	59077	1	Hydraulic Oil Tank
2.	59080	1	Front Grille
3.	17821	4	Capscrew
4.	80986	4	Capscrew
5.	80984	4	Lock Washer
6.	65107	1	Blower Wheel
7.	00111	3	Capscrew
8.	65108	1	Blower Hub
9.	20990	1	Key
10.	59076	1	Bushing
11.	59083	1	Blower Housing
12.	40433	5	Flange Bolt
13.	26831	2	Washer
14.	01213	2	Capscrew
15.	64937	1	Grip Plate

ITEM#	PART#	QTY	DESCRIPTION		
16.	43687	2	Capscrew		
17.	40080	1	Filter Assembly		
18.	51292	1	Standard Thread Union		
19.	66215	1	Cooler Mount (HP210BY)		
20.	59074	2	Flange Bolt (HP210BY)		
21.	59095	3	Flange Nut (HP210BY)		
22.	60774	1	Hose Clamp (HP210BY)		
23.	59075	1	Flange Bolt (HP210BY)		
24.	ı	1	Provided with Engine (HP210BY)		
25.	59091	1	Cooler		
26.	62296	2	Weather Strip		

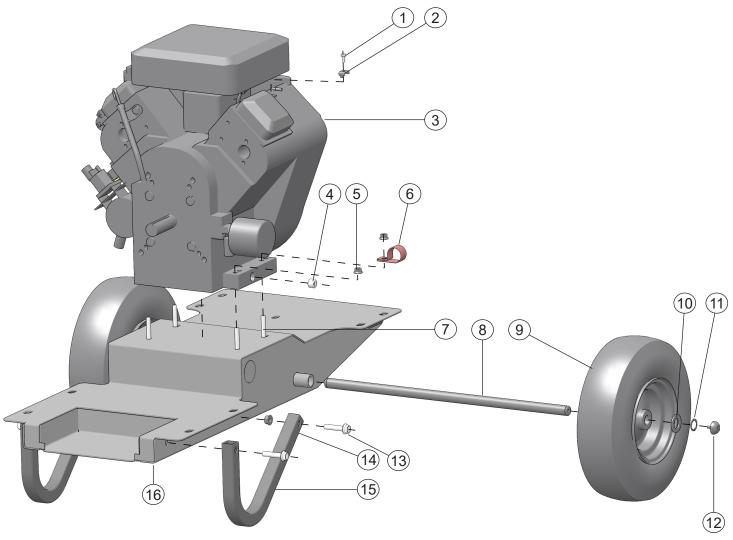
HP210 ENGINE PARTS LIST - BACK



ITEM#	PART#	QTY	DESCRIPTION		
1.	62324	1	Heat Shield		
	66214	1	Heat Shield (HP210BY)		
2.	65456	1	Spark Arrester (HP210BA HP210BBA)		
3.	36152	2	Screw		
4.	36151	1	Heat Shield		
5.	76753	1	Engine with Muffler		
	76721	1	Engine(HP210BY)		
6.	31765	1	Pressure Switch		
7.	40433	4	Flange Bolt		
8.	62385	2	Stud		
9.	07819	1	Square Key		
10.	56656	1	Coupling		
11.	56655	1	Pump Mount		
12.	01459	4	Washer		
13.	07860	4	Capscrew		

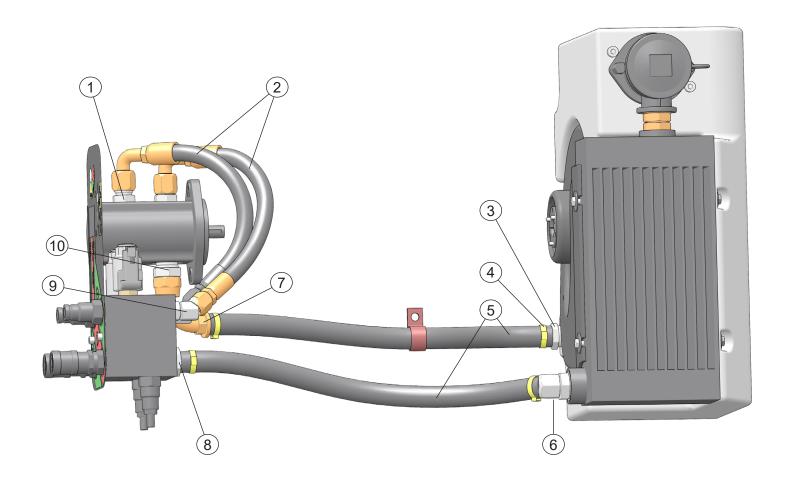
			<u>. </u>		
ITEM#	PART#	QTY	DESCRIPTION		
14.	18893	2	Flange Nut		
15.	371503	1	Nut		
16.	27695	1	Pump		
17.	73050	1	Fuel Tank		
18.	04303	1	Battery		
19.	60921	1	Battery Cover		
20.	15476	1	Capscrew		
21.	60945	1	Washer		
22.	71794	1	Fuel Cap		
23.	60920	2	Grommet		
24.	72401	1	Grommet Connector		
25.	60919	1	Fuel Elbow		
26.	72317	2	Hose Clamp		
27.	62289	1	Fuel Hose		
28.	72571	1	Fuel Vapor Hose		
29.	72451	2	Hose Clamp		

HP210 ENGINE PARTS LIST - BASE



ITEM#	PART#	QTY	DESCRIPTION		
1.	64991	1	Capscrew		
2.	56709	1	Cable Clamp		
3.	76753	1	Engine		
	76721	1	Engine (HP210BY)		
4.	01212	1	Pipe Plug		
5.	12787	4	Flange Nut		
6.	24287	1	Hose Clamp		
7.	58942	4	Flange Bolt		
8.	58917	1	Axle		
9.	56633	2	Foam Filled Tires		
10.	21318	2	Washer		
11.	31240	2	Retaining Ring		
12.	21714	2	Handle Bumper		
13.	58976	4	Flange Bolt		
14.	18893	2	Flange Nut		
15.	58975	2	Foot		
16.	58897	1	Frame Base Weldment		

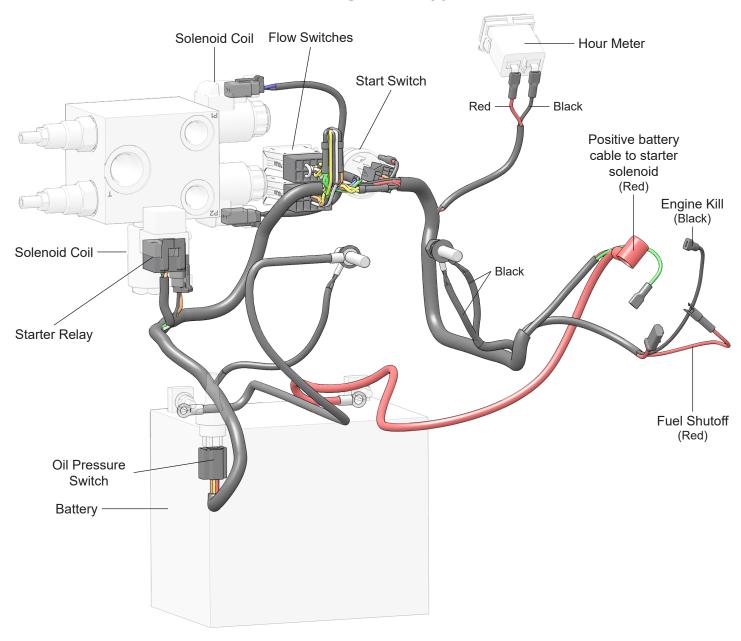
HOSES, FITTINGS & CLAMPS



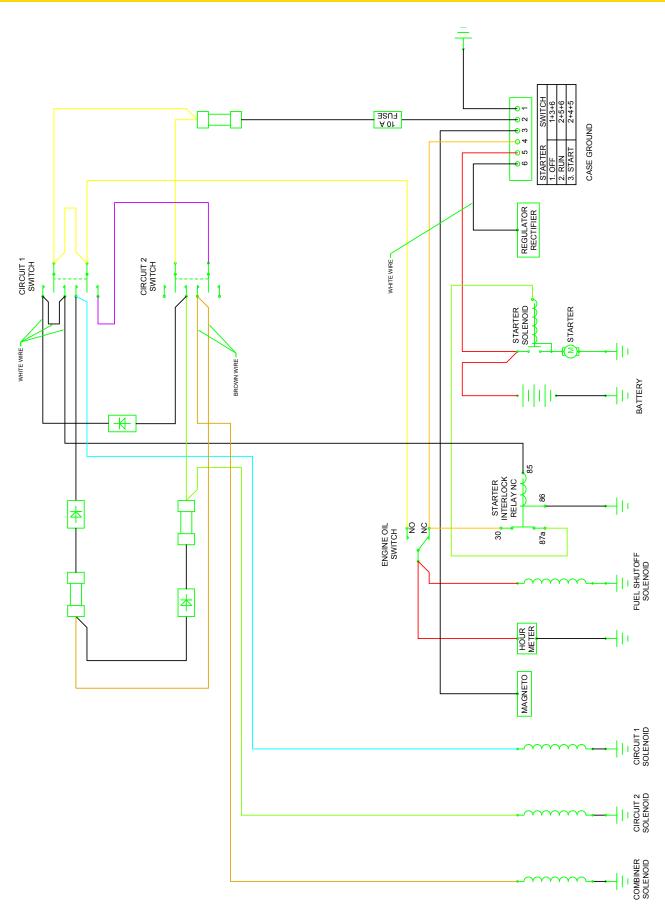
ITEM#	PART#	QTY	DESCRIPTION		
1.	350104	2	Connector		
2.	58943	2	Hose		
3.	59105	1	Hose Barb		
4.	62199	4	Hose Clamp		
5.	59089	2	Hose		
6.	40364	1	Elbow		
7.	58569	1	Elbow		
8.	59104	1	Hose Barb		
9.	350000	4	Elbow		
10.	02773	1	Adapter		

MAINWIRINGHARNESS

PARTNUMBER 79312



ELECTRICAL SCHEMATIC



STANLEY®

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