# **STANLEY**

# **HV18 HYDRAVERTER**



**USER MANUAL** Safety, Operation and Maintenance









# **DECLARATION OF CONFORMITY**

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



| I, the undersigned:       |
|---------------------------|
| Ich, der Unterzeichnende: |
| Je soussigné:             |
| FI abaio firmante:        |

lo sottoscritto:

Categoria:

Weisbeck, Andy

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:  | Hydraverter |
|----|------------|-------------|
|    | Kategorie: |             |
|    | Catégorie: |             |
|    | Categoria: |             |

2. Make/Marke/Marque/Marca/Marca Stanley

3. Type/Typ/Type/Tipo/Tipo: **HV18300 / HV18301** 

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

All

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<br>Richtlinie/Standards<br>Directives/Normes<br>Directriz/Los Normas<br>Direttiva/Norme | No.<br>Nr<br>Numéro<br>No<br>n. | Approved body Prüfung durch Organisme agréé Aprobado Collaudato |
|---|---------------------------------|---|
| ISO   | 3744:2010                       | Self  |
| BS EN   | 982+A1:2008                     | Self  |

 Special Provisions: None Spezielle Bestimmungen: Dispositions particulières: Provisiones especiales: Disposizioni speciali:

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| Done at/Ort/Fait à/Dado en/Fatto a Stanley H |                                 | Date/Datum/le/Fecha/Data | 1-24-11 |
|--|---------------------------------|--------------------------|---------|
| Signature/Unterschrift/Signature/Firma/Firma | Andy Wish                       |                          |         |
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# **IMPORTANT**

To fill out a Product Warranty Validation form, and for information on your warranty, visit Stanleyhydraulics.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 Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

# **▲ WARNING**

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 authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual 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.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This safety alert and signal word indicate an imminently hazardous situation which, if not avoided, <u>will</u> result in <u>death or serious injury</u>.

This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or serious injury</u>.

This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or serious injury</u>.

This signal word indicates a potentially hazardous situation which, if not avoided, <u>may</u> result in <u>property damage</u>.

This signal word indicates a situation which, if not avoided, <u>will</u> result in <u>damage</u> <u>to the equipment</u>.

This signal word indicates a situation which, if not avoided, <u>may</u> result in <u>damage to the equipment</u>.

IMPORTANT

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. |
|---|
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|   |
|   |

# **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 or on the tool and hose(s).

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

Supervising personnel may specify additional precautions for your work area to comply with company policies and local safety regulations. Enter any added precautions in the space provided in this manual.

This tool will provide safe, dependable service if operated in accordance with the instructions given in this manual. Read and understand the manual any decals, labels, or tags attached to the tool and hose(s). Failure to do so can cause serious personal injury or damage to the equipment.







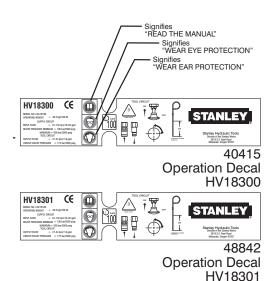
- Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Establish a training program for all operators to ensure safe operations.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, head protection, and safety shoes at all times when operating the tool.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Do not operate this tool without first reading the Operating Instructions.
- Do not install or remove this tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Never operate the tool if you cannot be sure that underground utilities are not present. Underground electrical utilities present an electrocution hazard. Underground gas utilities present an explosion hazard. Other underground utilities may present other hazards.
- Do not wear loose fitting clothing when operating the

- tool. Loose fitting clothing can get entangled with the tool and cause serious injury.
- Supply hoses must have a minimum working pressure rating of 2500 psi/175 bar.
- Be sure all hose connections are tight.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the tool.
- Wipe all couplers clean before connecting. Failure to do so may result in damage to the quick couplers
- and cause overheating. Use only lint-free cloths.
- Do not operate the tool at oil temperatures above 140° F/60° C. Operation at higher oil temperatures can cause operator discomfort and may cause damage to the tool.
- Do not operate a damaged, improperly adjusted, or incompletely assembled tool.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Do not exceed the rated limits of the tool or use the tool for applications beyond its design capacity.
- Always keep critical tool markings, such as labels and warning stickers legible.
- Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.
- Check fastener tightness often and before each use daily
- Warning: Use of this tool on certain materials during demolition could generate dust potentially containing a variety of hazardous substances such as asbestos, silica or lead. Inhalation of dust containing these or other hazardous substances could result in serious injury, cancer or death. Protect yourself and those around you. Research and understand the materials you are cutting. Follow correct safety procedures and comply with all applicable national, state or provisional health and safety regulations relating to them, including, if appropriate arranging for the safe disposal of the materials by a qualified person.



### **TOOL STICKERS & TAGS**





### NOTE:

THE INFORMATION LISTED ON THE STICKERS SHOWN, MUST BE LEGIBLE AT ALL TIMES.

REPLACE DECALS IF THEY BECOME WORN OR DAMAGED. REPLACEMENTS ARE AVAILABLE FROM YOUR LOCAL STANLEY DISTRIBUTOR.

The safety tag (P/N 15875) at right is attached to the tool 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

FAILURE TO USE HYDRAULIC HOSE LABELED AND CER-TIFIED 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 ELECTRICLINES BE SURE THE

CONDUCTIVE ON OR NEAR ELECTRICLINES 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.

- A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
- DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
- DO NOT EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.
- 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 OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

### DANGER

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

  MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONMECTED 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 CONNECTION MAY CAUSE REVERSE TREVERSING CONNECTION MAY CAUSE REVERSE PERSONAL NUIRY.
- PERSONAL INJURY.

  DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEMAND/OR SEVERE PERSONAL INJURY.
- BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
- WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.
- 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 OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

SAFETY TAG P/N 15875 (Shown smaller then actual size)

### **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.* 

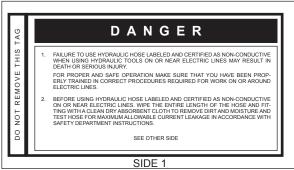
**Fabric-braided** (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is not certified non-conductive* and must never be used near electrical conductors.

### **HOSE SAFETY TAGS**

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley 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 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 Hydraulic Tools tool operating requirements and should not be used for any other applications. 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                   |
|        | Conducti        | Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS | <b>Braid or Fiber</b>   | 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      | 70 70           | 000  | 00 00   | 2/8         | 16              | Pressure       | 2500        | 175                   |
| 0-10.5 | 04-00           | 000-001  | 06-00   | 3/4         | 19              | Return         | 2500        | 175                   |
| 10-13  | 38-49           | up to 50   | up to 15  | 2/8         | 16              | Both           | 2500        | 175                   |
| 7      | 20 40           | 7  | 700   | 2/8         | 16              | Pressure       | 2500        | 175                   |
| 2-0    | 00<br>4-00<br>9 | 001-16   | 05-61   | 3/4         | 19              | Return         | 2500        | 175                   |
| 7      | 20 40           | 400 300  | 09 00   | 3/4         | 19              | Pressure       | 2500        | 175                   |
| 2-0    | 94-00           | 100-200  | 00-00   | _           | 25.4            | Return         | 2500        | 175                   |
| 707    | 09 07           |  | 0 0   | 2/8         | 16              | Pressure       | 2500        | 175                   |
| 0 -0   | 9-6-6           | c7 01 dn   | o 01 dn   | 3/4         | 19              | Return         | 2500        | 175                   |
| 707    | 70              | 76.400   | 0   | 3/4         | 19              | Pressure       | 2500        | 175                   |
| 01-61  | 49-00           | 70-100   | 05-0  | _           | 25.4            | Return         | 2500        | 175                   |

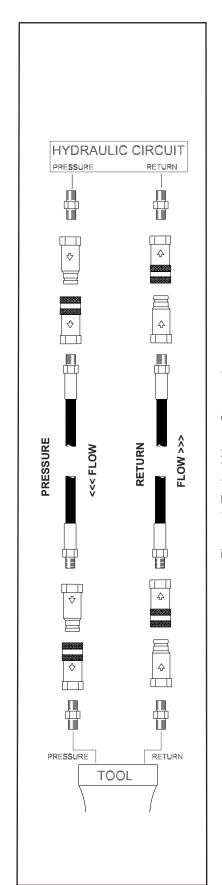


Figure 1. Typical Hose Connections

# **HTMA / EHTMA REQUIREMENTS**

### HTMA / EHTMA REQUIREMENTS

| HTMA   |                         | TOOL T                             | <b>YPE</b>        |                  |
|--|-------------------------|------------------------------------|-------------------|------------------|
| 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 min. 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 max. fluid temperature to: (at max. expected ambient temperature)   | 140° F                  | 140° F                             | 140° F            | 140° F           |
|  | (60° C)                 | (60° C)                            | (60° C)           | (60° C)          |
| Min. cooling capacity at a temperature difference of between ambient and fluid temps <b>NOTE:</b> Do not operate the tool at oil temperatures above 140° F discomfort at the tool. | 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)          |
|  | F (60° C). Operation at | t higher temperatu                 | res can cause ope | erator           |
| Filter Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity)   | 25 microns              | 25 microns                         | 25 microns        | 25 microns       |
|  | 30 gpm                  | 30 gpm                             | 30 gpm            | 30 gpm           |
|  | (114 lpm)               | (114 lpm)                          | (114 lpm)         | (114 lpm)        |
| Hydraulic fluid Petroleum based (premium grade, anti-wear, non-conductive) Viscosity (at min. and max. operating temps)  | 100-400 ssu*<br>(2      | 100-400 ssu*<br>20-82 centistokes) | 100-400 ssu*      | 100-400 ssu*     |
| NOTE:  |                         |                                    |                   |                  |

### NOTE:

LITRAA

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** 20Lpm at 138bc EHTMA CATEGORY 3.5-4.3 gpm 4.7-5.8 gpm 7.1-8.7 gpm Flow Range 9.5-11.6 gpm 11.8-14.5 gpm (13.5-16.5 lpm) (18-22 lpm) (27-33 lpm) (36-44 lpm) (45-55 lpm) Nominal Operating Pressure 1870 psi 1500 psi 1500 psi 1500 psi 1500 psi (at the power supply outlet) (129 bar) (103 bar) (103 bar) (103 bar) (103 bar) System relief valve setting 2000 psi 2000 psi 2495 psi 2000 psi 2000 psi (at the power supply outlet) (138 bar) (172 bar) (138 bar) (138 bar) (138 bar)

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



### **OPERATION**

### PRE-OPERATION PROCEDURES

 Check oil in reservoir. The end of the dipstick is the low level and the high level is at the line on the dipstick. If necessary fill the reservoir with ISO Grade 32 hydraulic oil.

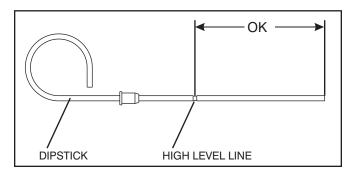


Figure 2. Check Oil Level

- 2. Connect the pressure hose from the supply circuit to the IN port on the manifold and the return hose to the OUT port.
- 3. The recommended hose size for the supply hoses is 3/4 in. ID with 3000 psi working pressure.

# **▲ WARNING**

Supply circuit relief setting must not exceed 3000 psi/207 bar. Higher pressures may cause personal injury and damage to the equipment.

The rated working pressure of supply circuit hydraulic hoses must be equal or higher than the relief setting on the hydraulic system.

### **OPERATION**

- Turn the tool circuit control valve off by pulling the knob and turning until the detent pin is locked into the shallow groove.
- Connect tool hoses to the couplers in the PRESS and RETURN ports. The recommended hose length is 25 ft./8 m with a 1/2 in./12.7 mm inside diameter. The hoses must have a working pressure rating of at least 2500 psi/175 bar. Also see HYDRAULIC HOSE REQUIREMENTS earlier in this manual.
- Turn supply circuit on then turn tool circuit control valve on to enable tool circuit.

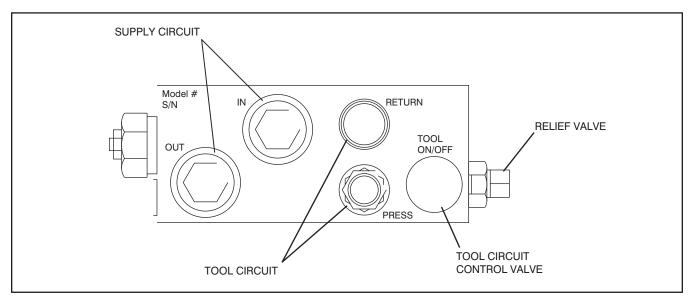


Figure 3. Tool Circuit

# **TOOL PROTECTION & CARE**

### RECOMMENDED HYDRAULIC OILS

Below is a list of recommended oils by brand.

| 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 |

<sup>\*</sup>Recommended for extreme cold temperatures

# **NOTICE**

In addition to the Safety Precautions found in this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before connection.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the "IN" port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow (see Specifications) in this manual for correct flow rate and model number. Rapid failure of the internal seals may result.
- Always keep critical tool markings, such as warning stickers and tags legible.

- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

# **TROUBLESHOOTING**

This section describes how to find and resolve problems users may experience. If a situation occurs that is not covered, call your Stanley Customer Service representative for assistance.

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

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

| Symptom  | Possible Cause   | Solution   |
|--|--|--|
| Pump/motor does not run with supply circuit energized. | Supply hoses not connected properly.                   | Make sure hoses are connected to the proper ports. Pressure line must be connected to the IN port.                 |
|  | Hydraulic supply source relief set too low.            | Adjust system relief to 2000–3000 psi.   |
|  | Flow control valve damaged or out of adjustment.       | Contact authorized dealer for service.   |
|  | Mechanical failure of pump/motor unit.                 | Replace pump/motor unit.   |
| Tool circuit does not operate tools                    | Relief valve set too low.                              | Adjust relief valve to 2100–2250 psi.  |
| properly.  | Supply circuit does not provide enough hydraulic flow. | Make sure supply system provides at least 13 gmp @ 2000 psi on HV18301 and at least 16 gpm @ 2000 psi for HV18300. |
|  | Couplers or hose blocked.                              | Remove obstruction.  |
| Tool gets too hot.                                     | Inlet screen or cooler clogged with debris.            | Clean out inlet screen or cooler.  |

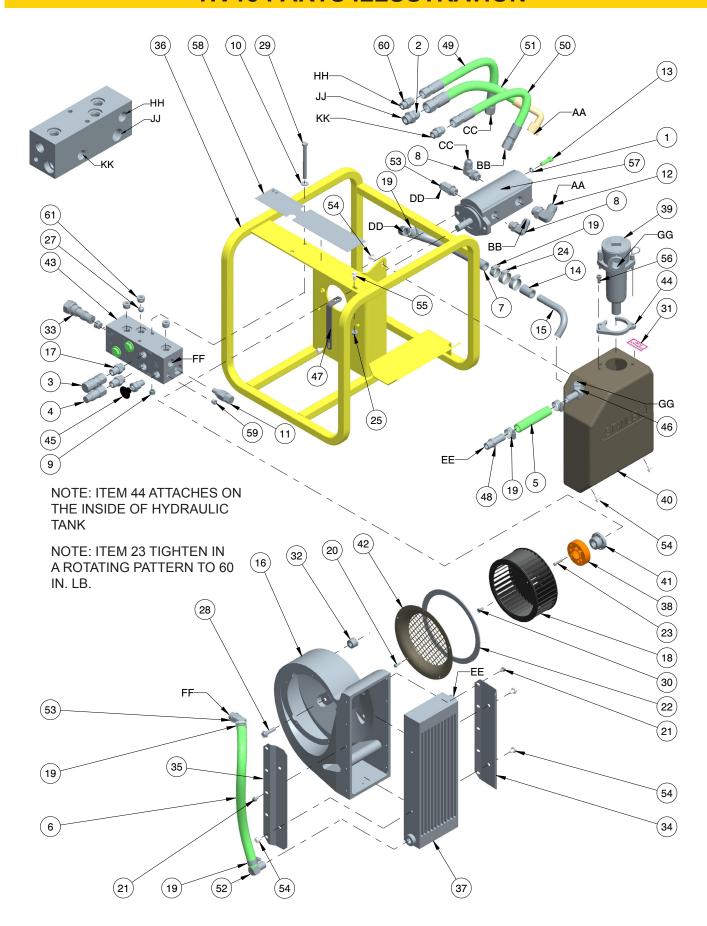
# **SPECIFICATIONS**

| Weight            | 109 lbs/49.5 kg                    |
|-------------------|------------------------------------|
| Overall Length    | 21.25 in/540 mm                    |
|                   |                                    |
| Input Flow        |                                    |
| HV18300           |                                    |
|                   | 13–25 gpm/49–95 lpm                |
|                   |                                    |
|                   | 200 °F/93 °C                       |
|                   | 12 (3/4) SAE ORB                   |
|                   |                                    |
|                   | 2150 psi/148 bar                   |
| Couplers          | HTMA Flush Face Type Male & Female |
|                   | 1/2 in NPT                         |
|                   | 7–9 gpm @ 2000 psi                 |
|                   |                                    |
| Sound Power Level | 100 dBA                            |
| Vibration Level   | NA                                 |
|                   |                                    |

# **ACCESSORIES**

| Filter Service Kit | 43592 |
|--------------------|-------|
| Filter Element     | 40408 |
| Supply Hose Kit    | 51290 |

# **HV18 PARTS ILLUSTRATION**



# **HV18 PARTS LIST**

| ITEM | P/N   | QTY | DESCRIPTION                 |
|------|-------|-----|-----------------------------|
| 1    | 00683 | 2   | LOCKWASHER 3/8" I.D         |
| 2    | 02773 | 1   | ADAPTER 12 F50X             |
| 3    | 03975 | 1   | COUPLER,3/8 FEM 1/2NPT      |
| 4    | 03976 | 1   | COUPLER,3/8MALE 1/2NPT      |
| 5    | 04306 | 1   | HOSE 3/4 4-3/4" LONG        |
| 6    | 04306 | 1   | HOSE 3/4 19" LONG           |
| 7    | 04306 | 1   | HOSE 3/4 16" LONG           |
| 8    | 04321 | 2   | STRAIGHT THREAD ELBOW       |
| 9    | 04353 | 2   | NYLOCK NUT 3/8-16UNC        |
| 10   | 04585 | 2   | WASHER 3/8" I.D.            |
| 11   | 05043 | 1   | RELIEF VALVE                |
| 12   | 05967 | 1   | STRAIGHT THREAD ELBOW       |
| 13   | 06151 | 2   | HSHCS 3/8-16 X 1-1/4 GR8    |
| 14   | 07747 | 1   | SUCTION SLEEVE              |
| 15   | 07749 | 1   | SUCTION TUBE                |
| 16   | 07783 | 1   | BLOWER HOUSING              |
| 17   | 07882 | 2   | ADAPTER 10-1/2 F50F         |
| 18   | 08035 | 1   | BLOWER WHEEL                |
| 19   | 08045 | 6   | HOSE CLAMP, 7/8 dia         |
| 20   | 08667 | 5   | SHEET METAL SCREW           |
| 21   | 08668 | 10  | SHEET METAL SCREW           |
| 22   | 08669 | 1   | GASKET                      |
| 23   | 10706 | 3   | HSHCS 10-24 X 1.000         |
| 24   | 11179 | 2   | HOSE CLAMP, 7/8 dia         |
| 25   | 12787 | 1   | FLANGE NUT 5/16-18          |
| 27   | 18952 | 1   | STEEL BALL 5/8              |
| 28   | 24142 | 4   | HEX FLANGE BOLT 3/8 X 1-1/2 |
| 29   | 27634 | 2   | HHCS 3/8-16UNC X 4.500      |
| 30   | 27931 | 4   | HHCS 1/4-20UNC X .500       |
| 31   | 35686 | 1   | HYDRAULIC FLUID DECAL       |
| 32   | 35782 | 4   | SPACER                      |
| 33   | 37301 | 1   | FLOW REGULATOR              |
| 34   | 40053 | 1   | COOLER MOUNT                |
| 35   | 40054 | 1   | OFFSET COOLER MOUNT         |
| 36   | 40075 | 1   | FRAME WELDMENT              |
| 37   | 40078 | 1   | COOLER                      |
| 38   | 40079 | 1   | BLOWER HUB                  |
| 39   | 40080 | 1   | FILTER ASSY                 |
| 40   | 40082 | 1   | HYDRAULIC TANK              |

| ITEM | P/N    | QTY | DESCRIPTION                            |
|------|--------|-----|--|
| 41   | 40083  | 1   | QD BUSHING                             |
| 42   | 40084  | 1   | INLET RING ASSY                        |
| 43   | 40089  | 1   | MANIFOLD                               |
| 44   | 40133  | 1   | GRIP PLATE                             |
| 45   | 40137  | 1   | CARTRIDGE- HYDRA FORCE<br>MP10-20C-0-N |
| 46   | 40364  | 1   | ELBOW 45 3/4 SAE TO 3/4<br>BARB        |
| 47   | 40401  | 1   | ANGLE BRACKET                          |
| 48   | 40405  | 1   | HOSE BARB 1/2NPT TO 3/4                |
| 49   | 40406  | 1   | HOSE 451TC-17"                         |
| 50   | 40406  | 1   | HOSE 451TC-17"                         |
| 51   | 40407  | 1   | HOSE 451TC-15.5"                       |
| 52   | 40413  | 1   | ELBOW 1/2NPT TO 3/4 HOSE<br>BARB       |
| 53   | 40414  | 2   | ELBOW 45 -10 SAE TO 3/4<br>BARB        |
| 54   | 40433  | 7   | HEX FLANGE BOLT                        |
| 55   | 40435  | 1   | HEX FLANGE BOLT                        |
| 56   | 43687  | 1   | HSHCS M8 X 16                          |
| 57   | 48841  | 1   | PUMP/MOTOR HV18301                     |
|      | 40081  | 1   | PUMP/MOTOR HV18300                     |
| 58   | 48842  | 1   | DECAL, OPERATION HV18301               |
|      | 40415  | 1   | DECAL, OPERATION HV18300               |
| 59   | 350041 | 1   | HOLLOW HEX PLUG -4 SAE                 |
| 60   | 350104 | 2   | STRAIGHT THREAD                        |
|      |        |     | CONNECTOR                              |
| 61   | 350237 | 4   | HOLLOW HEX PLUG - 8 SAE                |

COUPLER SET P/N-03974

# **STANLEY**®

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