



Operator's Manual

PHP1400



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Introduction

Thank you for choosing a Titan Hydraulic-Power Pack. The performance of this tool is dependent upon your knowledge of the information contained in this operator's manual and your understanding of the operation and care of the engine installed on your Titan Power Pack.

This power pack is powered by a Vanguard Engine. The Vanguard operator's manual is provided to you along with this Titan Power Packs operator's manual. Keep both manuals with your power pack for reference by all operators. Follow all recommended maintenance for both the Titan Power Pack and Vanguard Engine. Details for proper hydraulic flow can be found in the technical data section of the manual.

Your Titan Power Pack comes with a one-year parts warranty (see the *Warranty* section of this manual). We suggest that you read the warranty information and fully understand its coverage and application as well as your responsibilities of ownership. Titan Power Pack should be registered as soon as possible, to register your Titan Power Pack, go to <https://www.titanpostdrivers.com/warranty-registration/> and fill out the warranty registration form.

Please contact Titan Post Drivers at (702) 293-4262 for parts or technical questions related to your post driver warranty. Please contact dealer of the hydraulic source for parts or technical questions related to it.



Titan PHP1400

Safety Warnings

- 1) **Operators:** All operators must understand the safety precautions and operating procedures described in this owner's manual before using the PHP1400 power pack. Keep this operator's manual with the driver for reference by all operators. Never let children or uniformed people operate the driver.
- 2) **Operation:** Turn the power pack off when not in use to prevent unauthorized use.
- 3) **Operation:** Do not leave the power pack unattended when connected to a hydraulic tool.
- 4) **Click-Before-You-Dig:** Before driving any material, always have the location of underground utilities identified by a certified locating service. You can call 811, check on www.clickbeforeyoudig.com, or check with your local authorities to request this service.
- 5) **PPE:** The operator must wear proper personal protective equipment (PPE) when operating the driver. This includes but is not limited to the following:
 - Class 4 (SLC80 = 22.4 dB) hearing protection or greater
 - Impact-resistant (ANSI Z87+) eye protection with side guards
 - Protective gloves
 - Slip resistant protective boots
 - A hard hat when lifting the driver overhead
- 6) **PPE:** Bystanders should also wear PPE, especially eye and ear protection. Otherwise, bystanders should maintain adequate distance from the operating area to avoid injury.
- 7) **Vibration:** Excessive vibration can cause circulatory and neural damage to the hands. Symptoms include pain, numbness, coldness, and paleness in the fingers. If you experience these symptoms, stop using the post driver and seek medical attention. To reduce the effects of vibration:
 - Wear padded gloves
 - Do not excessively squeeze handles during use
 - Keep hands warm
 - Take frequent breaks
- 8) **Hydraulic Source:** Only use approved hydraulic hoses to connect to the source.
- 9) **Maintenance:** Check the fuel tank for damage or leaks. If found, do not use the power pack

until the fuel tank is replaced. If damage occurs during use, immediately shut off the power pack.

- 10) **Maintenance:** Before every use, be sure to inspect your power pack for loose hardware and tighten as needed.
- 11) **Maintenance:** When checking for hydraulic oil leaks be aware of the risk of oil jets. Never use fingers to check for leaks and keep suspected leaks away from face. Use cardboard or other material to check for leaks. Oil jets can penetrate the skin, if skin is penetrated seek immediate medical attention.
- 12) **Gasoline:** Gasoline vapors and exhaust fumes are toxic. Only refill and operate the power pack in a well-ventilated environment to avoid exposure to vapors. To minimize exposure to exhaust fumes, hold the driver with the engine facing away from you during operation. Before transport, empty the fuel tank to avoid leaking gasoline and exposure to vapors.

Operating Instructions

Your Titan Power Pack is designed to be as effective and efficient as possible, while being extremely powerful. It is very important to understand that your power pack is a powerful machine. With proper use and maintenance, your Titan Power Pack will provide you with many years of service.

To reduce the risk of serious injury or death, you must read and understand the safety and operating instructions in this operator's manual. Each new person who uses this machine must be educated and fully understand this operator's manual. Never allow an uninformed person to use your Titan Power Pack.

For optimum performance, use hydraulic fluid that is appropriate for your environment.

Visually check the power pack to ensure there are no signs of damage to the unit before use each time.

Check all fasteners and tighten as necessary. Follow torque requirements specified in the reassembly section of this manual.

DO NOT use your Titan Power Pack if there is any damage or wear to any of the controls or safety devices.

Be sure to use all personal protective equipment as outlined in the Safety Warnings section of this manual.

Connecting to Hydraulic Tools

The power pack can be connected to various hydraulic power tools including rock breakers, augers, and of course Titan Hydraulic Post Drivers, the design of which ensures your new Titan Power Pack the absolute best working conditions.

It is important that the power pack is not subjected to an oil flow and a working pressure beyond its design capability. Please refer to the ID-tag on the power pack in case of doubt. Check the oil flow and the working pressure by means of test equipment. The test equipment should comprise a pressure gauge, a flow meter and a valve for adjustment of the pressure.

Make sure that:

- The oil flow is not too high
- The working pressure is not too high

- The return pressure is not too high
- The pressure relief valve is not set higher than 160 bar
- The internal diameter of the hoses is sufficient (min. ½")
- All couplings are clean
- The power pack is equipped with an oil filter of min. 25 Micron

Hoses with too small internal diameter and/or defect couplings cause the power pack to work with incorrect working pressure. Your dealer can help you check this.

In case of doubt, please contact your dealer or Titan Post Drivers.

Before Use

Filling Up Hydraulic Oil

Before using the power pack, you must fill the unit with hydraulic oil.

To fill up with hydraulic oil, loosen the filter cover on top of the power pack.



Remove the filter element (see photo) and fill up with oil. When oil is showing at the bottom of the filter unit, there is enough oil on the power pack.



Insert the filter element again, mount the cover and the power pack is ready for use.

Please note: When connecting new extension hoses, it may be necessary to fill up with extra hydraulic oil after the hoses are filled with fluid. Therefore, always top off the power pack when connecting new extension hoses.

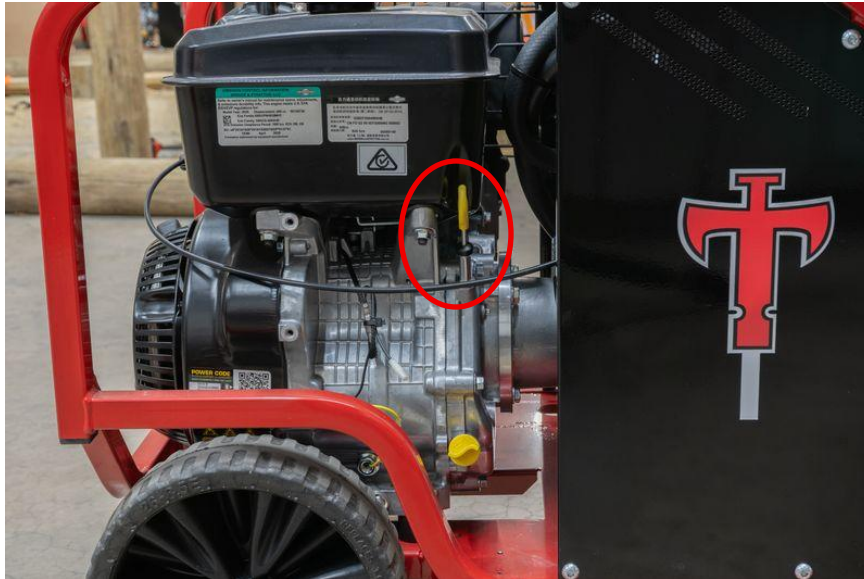
Add Engine Oil (*initial use*) / Check oil

1. Add engine oil when new. Oil is drained from the engine after testing from factory.

Engines - Add oil if required to fill to the bottom edge of the oil fill hole. Do NOT overfill.

2. Check engine oil before each use - Place unit on a level surface, screw off the oil fill cap, check the oil level as shown in Figure 2, if the oil is low, add oil to reach the upper limit.

The dipstick should be placed on top of the threads, not threaded in when checking.



3. Replace after an initial 10 hours of use and every 50 hours thereafter or when oil appears dirty.

4. Use SAE 5W-30 engine oil. Please see your Vanguard engine operator's manual for acceptable alternatives.

Safe Starting

Place the machine on a secure, solid surface in an open area. **DO NOT** start the power pack anywhere except in an open, well-ventilated area. Never use your machine inside an enclosed building.

Connect hydraulic hoses to the tool and power pack. **ALWAYS** connect the hoses to the tool and hydraulic source before starting the source's hydraulic pump. Ensure quick couplings are clean before connecting the hoses.

Switch the fuel tap to "ON"

Place the choke in the open position.

Turn the ignition switch to the "ON" position.



Pull the Engine Start Cord.

Move the hydraulic flow lever to the desired flow rate.

- The desired oil flow can be set on the front of the power pack. A marking is engraved in the lever.
- Turn the lever to the right until the marking is opposite the required flow
- The pressure relief valve setting will be the same on all flows.

Service and Maintenance

Proper maintenance of your Titan Hydraulic Power Pack is necessary for its long-term use.

Daily Maintenance

Check Hoses

Check couplings and clean carefully

Check the Engine Oil Level

Check the Hydraulic Fluid Level

Yearly Maintenance

Replace the Engine Oil

Replace the Hydraulic Fluid

Replace the Hydraulic Fluid Filter

Replace the Air Filter

Replace the Fuel Filter

Technical Data

Please attached technical data for your power pack.

PHP1400

The Titan PHP1400 Hydraulic Power Pack is designed in accordance with the EHTMA categories C and D, which prescribe a minimum performance of 5 GPM at 2000 PSI and 8 GPM at 2000 PSI, respectively.

With manual flow adjustment. This power pack can be set to 5 GPM or 8 GPM on the front of the power pack.

The power pack is mounted with a pressure relief valve to avoid a too high pressure. Furthermore, the very efficient air cooling protects the power pack against overheating.

OIL FLOW	5 GPM at 2500 RPM 8 GPM at 3600 RPM
WORKING PRESSURE NOMINAL	1750 psi
PRESSURE RELIEF VALVE	2200 psi
PUMP	Gear pump
OIL TEMPERATURE	158° F
HYDRAULIC OIL TANK CAPACITY	Minimum 1.6 gallons Maximum 2.1 gallons
PETROL TANK CAPACITY	1.7 gallons
HYDRAULIC SYSTEM COMPLETE	2.4 gallons
FILTER SYSTEM (FILTER ELEMENT)	25 Micron with by-pass
ENGINE WWW.VANGUARDPOWER.COM	Vanguard single cylinder 4-stroke petrol 14 HK / 10.3 kW Motor code: 25V332- 0003-F1
ENGINE OIL	0.3 gallons
GUARANTEED SOUND POWER LEVEL LWA	101 dB
NOMINAL PRESSURE	1490 psi

NOMINAL FLOW	5.8 GPM
DIMENSIONS (LXWXH)	28 x 22 x 25
WEIGHT, WITHOUT HYDRAULIC OIL	202.5 lbs

Oil

Ambient temperature range	Below 10°C 50°F	10 ... 30°C 50 ... 86°F	Above 30°C 86°F
Recommended oil viscosity grade	VG 32	VG 46	VG 68

Recommended oil cleanliness	ISO 4406 /19/16 / NAS 1638 10		
Permitted viscosity	cSt	10 – 600	
Viscosity index	Minimum	100	
Oil temperature area	°C /°F	-20 to 70 / -4 to 158	

Warranty

Titan Post Drivers will warrant to the original purchaser, who purchases the equipment in new condition and in its original packaging from an authorized dealer, that its gas-powered power pack will be free from defects in workmanship and materials for a period of one (1) year. This warranty period will commence on the date of retail purchase by the original purchaser.

- To register your Titan Power Pack, go to <https://www.titanpostdrivers.com/warranty-registration/> and fill out the warranty registration form.
- Warranty shall pertain to parts or service offered by an authorized Titan Post Drivers dealer. Any defective part replaced at an authorized Titan Post Drivers location becomes the property of Titan Post Drivers.
- Shipping costs to transport the machine to and from the service center for warranty work will be the responsibility of the consumer.
- For warranty claims, contact Titan Post Drivers with proof of purchase date and your serial number.

Limitations of Warranty

This limited warranty does not extend to any Titan Post Drivers product which has been misused, abused, or improperly maintained, altered, or repaired by an unauthorized person. Nor does this limited warranty cover any damage to machine or parts due to faulty installation of parts, faulty operation, or faulty maintenance.

- Damage to components caused by operator error such as dry-fire or misfire will not be considered for warranty replacement or service.
- Damage to cosmetic parts caused by rough handling, operator error, or improper storage and handling will not be considered for warranty replacement or service.
- Excluded components may need replacement or repair due to normal wear and tear, or lack of proper use/maintenance include:
 1. O-rings and seals
 2. Lost or stripped fasteners

Disclaimer of Warranty

Titan Post Drivers disclaims all liability for any implied warranties. Under no circumstances shall Titan Post Drivers be liable for any loss of business, revenues, profit, or indirect, incidental, special, or consequential damages or loss arising out of any defect in, or performance of, Titan Post Drivers products, howsoever caused.



Your Titan Hydraulic Post Driver and/or Power Pack have a one-year warranty.
Please refer to your operator's manual for complete warranty details.

*You MUST complete this registration within 30 days of purchase for the warranty to be valid.
Warranty is non-transferrable.*

Votre enfonce-pieux hydraulique Titan et/ou votre groupe motopompe bénéficient d'une garantie d'un an.
Veuillez consulter le manuel de l'utilisateur pour connaître tous les détails de la garantie.

*Vous DEVEZ compléter cet enregistrement dans les 30 jours suivant l'achat pour que la garantie soit valide.
La garantie n'est pas transférable.*

Su hincapostes hidráulico y/o unidad de potencia Titan cuentan con una garantía de un año.
Consulte el manual del operador para conocer todos los detalles de la garantía.

DEBE completar este registro dentro de los 30 días posteriores a la compra para que la garantía sea válida.
La garantía no es transferible.

Name/Nom/Nombre: _____

Driver Serial Number/Numéro de série du pilote de poste/Número de serie del conductor:

Power Pack Serial Number/Numéro de série du bloc d'alimentation/Número de serie del paquete de alimentación:

Place of Purchase/Lieu d'achat/Lugar de compra: _____

Date of Purchase/Date d'achat/Fecha de compra: _____

Visit us online at www.titanpostdrivers.com/pages/registration to complete your warranty registration. Or, scan the QR code to complete your warranty registration on your mobile device.

Visitez-nous en ligne sur www.titanpostdrivers.com/pages/registration pour finaliser votre enregistrement de garantie. Ou scannez le code QR pour finaliser votre enregistrement de garantie sur votre appareil mobile.

Visítenos en línea en www.titanpostdrivers.com/pages/registration para completar el registro de su garantía. O escanee el código QR para completar el registro de garantía en su dispositivo móvil.



Date of Completion/Date d'achèvement/Fecha de realización: _____

Exploded View

Fig. 1

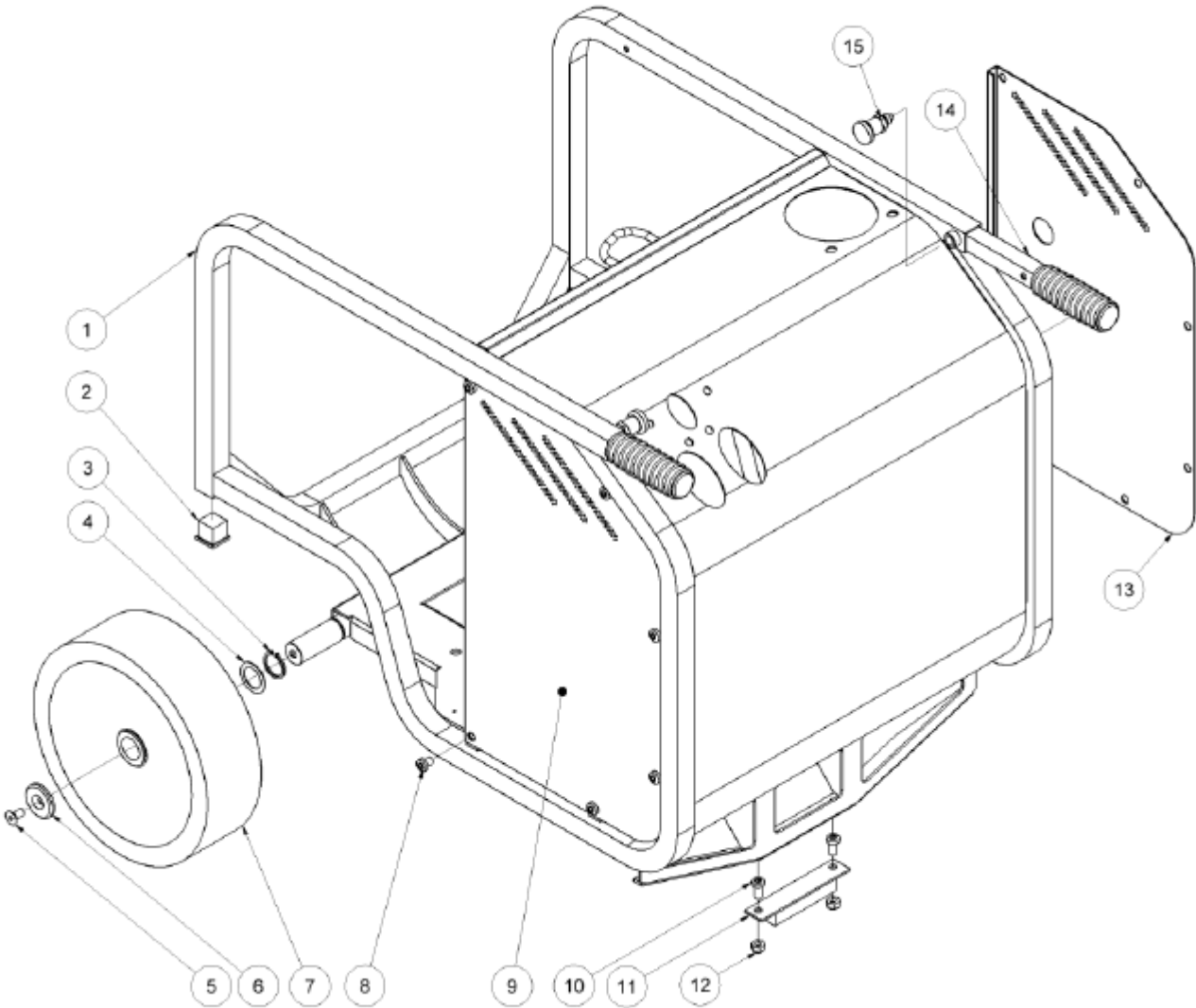


Fig. 2

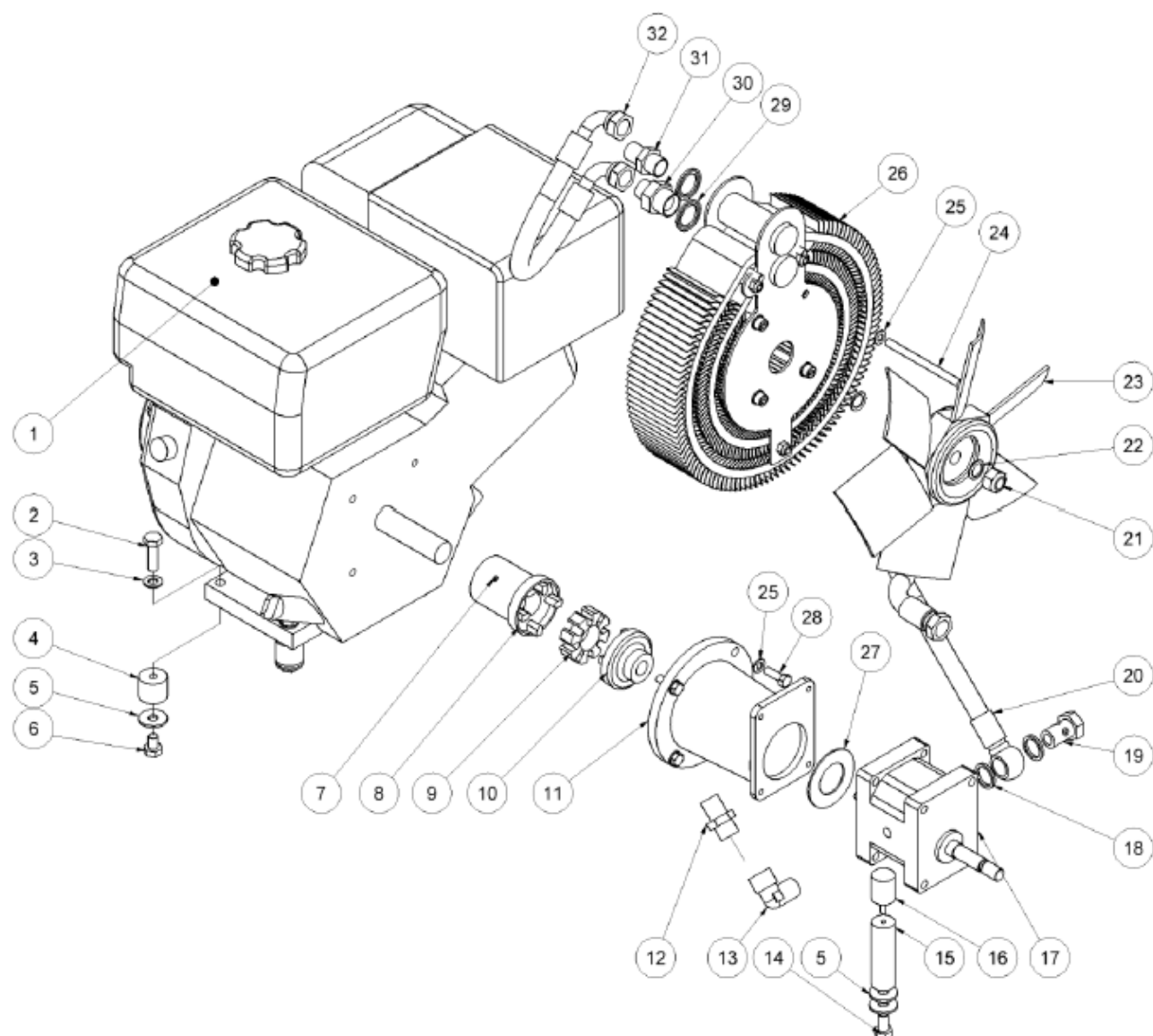


Fig. 3

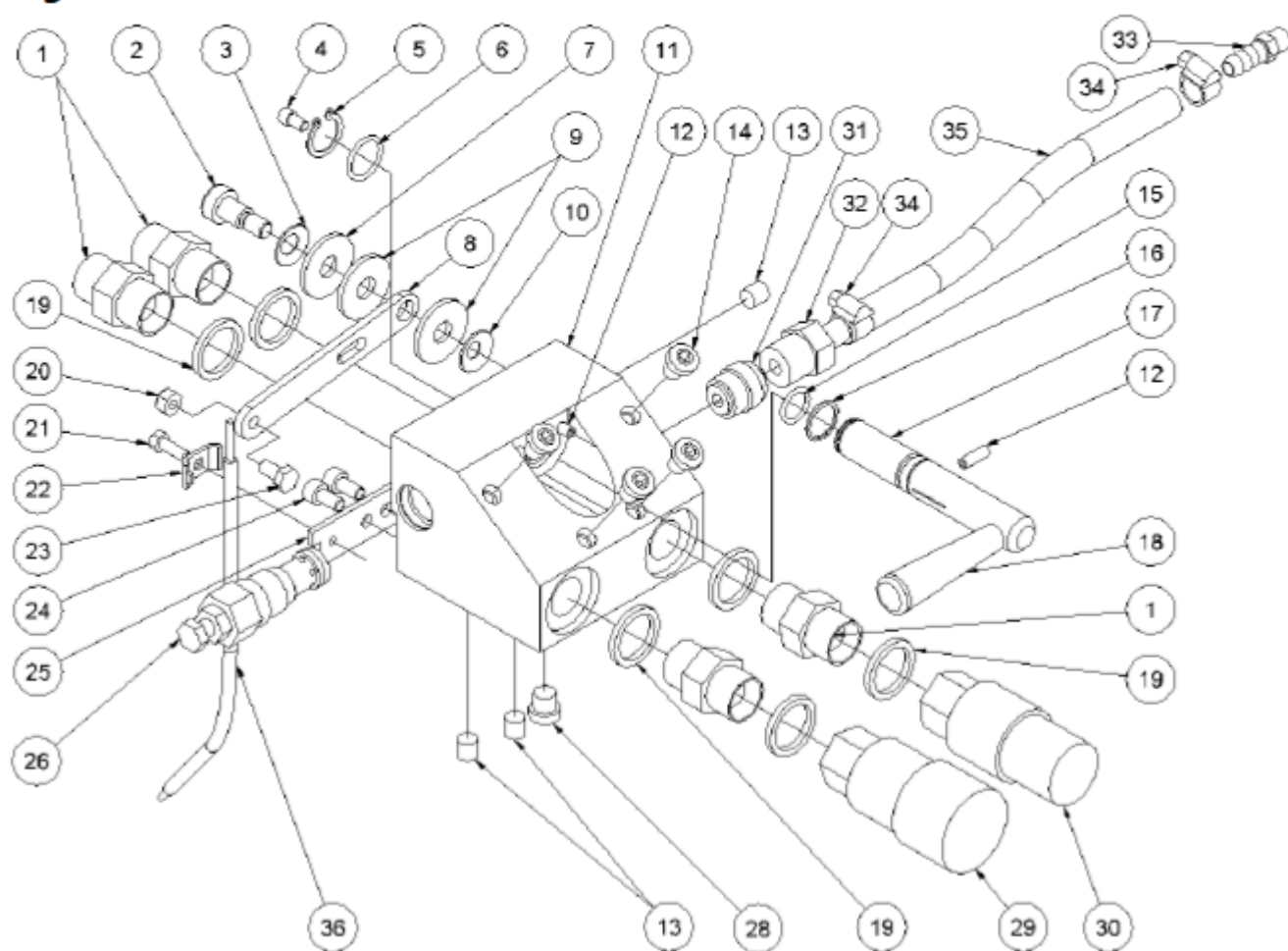


Fig. 4

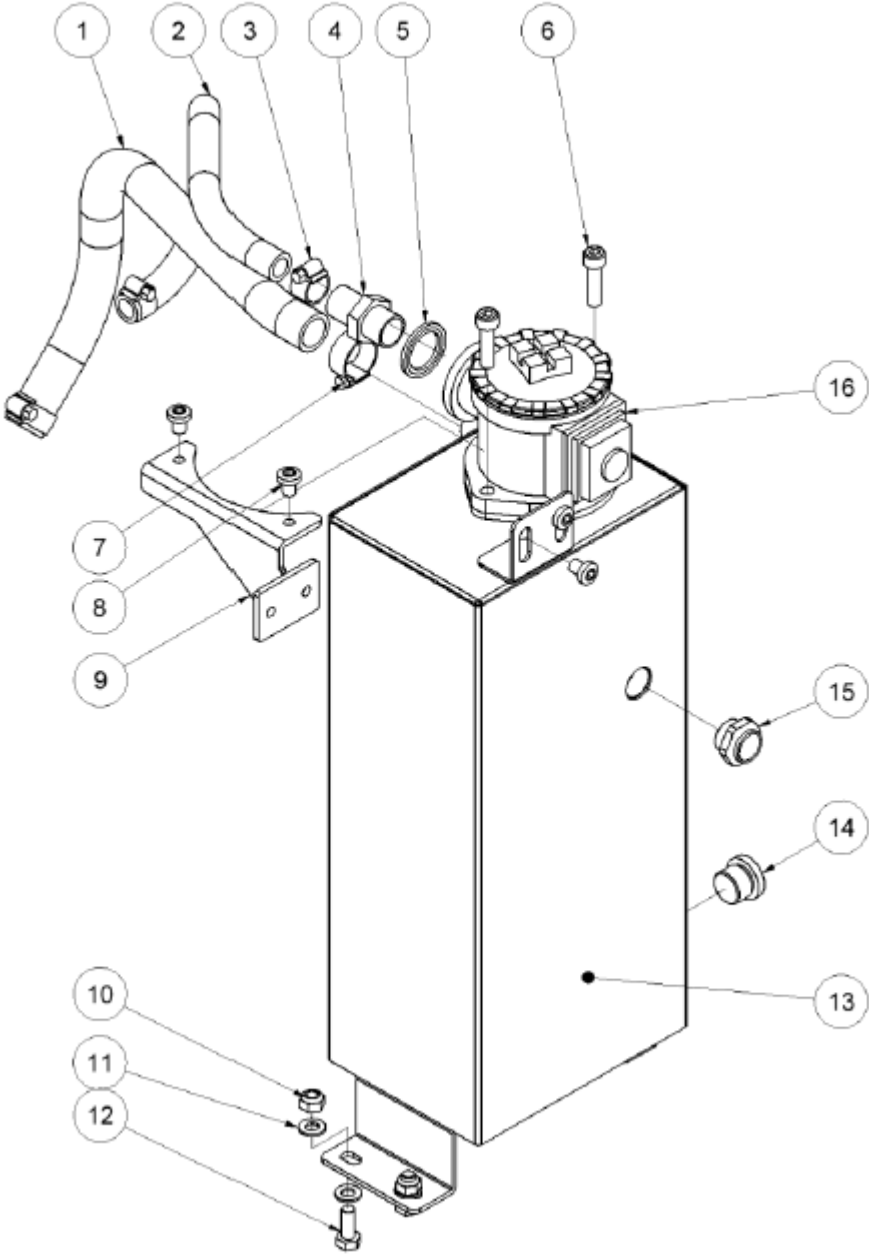
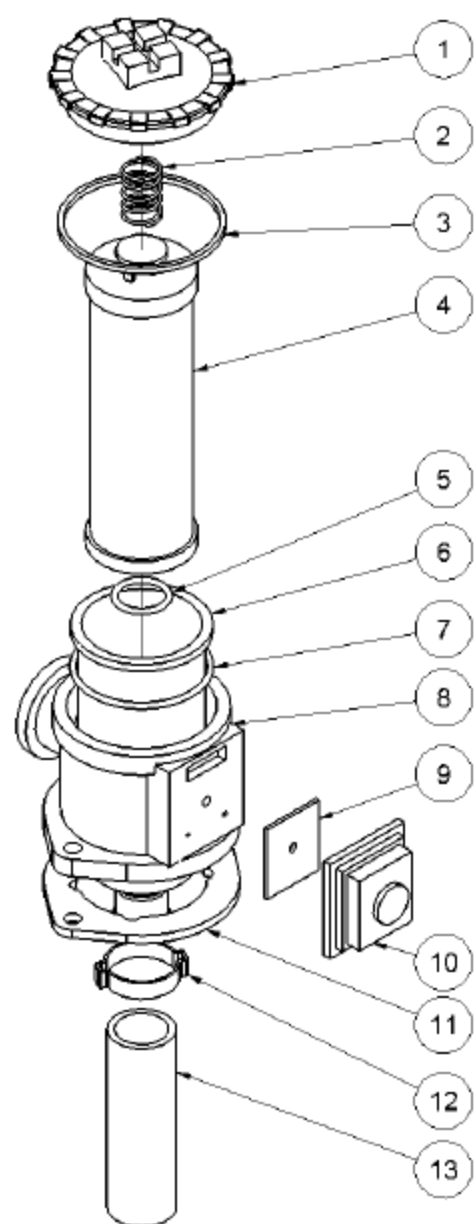


Fig. 5



Part Kits

Drive Kit

Part Number	Description	QTY
2-7	Set screw M6x8	4
2-8	Coupling engine part	1
2-9	Rubber coupling	1
2-10	Coupling pump	1

Drive Housing Kit

Part Number	Description	QTY
2-11	Coupling housing	1
2-25	Washer M8	8
2-27	Centering washer	1
2-28	Screw 5/16" UNFx25	4

Panels and Frame Kit

Part Number	Description	QTY
1-1	Chassis complete HPP13/13 FLEX	1
1-2	Tube plug 25x25	2
1-8	Screw M8x10	12
1-9	Side cover Right	1
1-13	Side cover Left	1
1-14	Pull-out handle w/rubber grip	2
1-15	Bolt	2

Engine Support Kit

Part Number	Description	QTY
2-2	Screw M10x35	1
2-3	Washer M10	4
2-4	Rubber damper ø30x25	4
2-5	Washer M10	4
2-6	Screw M10x14	6
2-14	Screw M10x20	1
2-15	Supporting leg	1
2-16	Rubber damper M6x18	1

Valve Block Seal Kit

Part Number	Description	QTY
3-5	Retaining ring A17	1
3-6	O-ring 17x2 mm	1
3-15	O-ring 13x2 mm	1
3-18	Lever ON/OFF	1
3-19	Seal ring 1/2"	6
3-34	Hose clip 3/8"	2

Hydraulic Kit

Part Number	Description	QTY
4-1	3/4" hose	1
4-2	1/2" hose	1
4-3	Hose clip 1/2"	2
4-4	Hose fitting 1/2"x3/4"	1
4-5	Seal ring 3/4"	1
4-6	Screw M8x30	2
4-7	Hose clip 3/4"	2
4-8	Screw M8x10	4
4-9	Tank Bracket	1
4-10	Lock nut M8	4
4-11	Washer M8	8
4-12	Screw M8x20	4
4-13	Hydraulic tank	1
4-14	Threaded plug 1/2" w/seal	1
4-15	Sight glass 1/2" w/seal	1
4-16	Filter complete (See fig.5)	1

Throttle Cable Kit

Part Number	Description	QTY
3-2	Shoulder bolt ø10/M8x12	4
3-3	Disc spring ø10.2/ø20x0.8	1
3-8	Eccentric plate Ø9	1
3-9	Nylon washer ø10.5/30/2.5	2
3-10	Disc spring ø8.2/ø20x1.0	1
3-20	Nut M6	1
3-21	Screw M5	1
3-22	Cable clamp	1
3-23	Screw	1
3-24	Screw M6x12	2
3-36	Throttle cable complete	1

Wheel Kit

Part Number	Description	QTY
1-3	Retaining ring 25x2	2
1-4	Shim ring 25/35/1 mm	2
1-5	Screw M8x16	2
1-6	Wheel lock	2
1-7	Flat-free rubber wheel	2
1-10	Screw M8x16	2
1-11	Rubber foot	1
1-12	Lock nut M8	2

Valve Block Kit

Part Number	Description	QTY
3-1	Fitting 1/2"x1/2" BSP	1
3-2	Shoulder bolt ø10/M8x12	4
3-3	Disc spring ø10.2/ø20x0.8	1
3-4	Screw M5x8	1
3-5	Retaining ring A17	1
3-6	O-ring 17x2 mm	1
3-7	Washer 10x30x2	1
3-8	Eccentric plate Ø9	1
3-9	Nylon washer ø10.5/30/2.5	2
3-10	Disc spring ø8.2/ø20x1.0	1
3-11	Valve block	1
3-12	Roll pin ø5x14	3
3-13	Pipe plug 1/8"	3
3-14	Screw M8x16	4
3-15	O-ring 13x2 mm	1
3-16	Retaining ring AV17	1
3-17	Spool	1
3-18	Lever ON/OFF	1
3-19	Seal ring 1/2"	6
3-20	Nut M6	1
3-21	Screw M5	1
3-22	Cable clamp	1
3-23	Screw	1
3-24	Screw M6x12	2
3-25	Cable plate	1
3-26	Pressure relief valve	1
3-28	Threaded plug 1/8" w/seal	1
3-29	Q.R. coupling 1/2" BSP female	1
3-30	Q.R. coupling 1/2" BSP male	1
3-31	Check valve	1
3-32	Hose fitting 3/8"x1/2"	1
3-33	Hose fitting 3/8"x1/8"	1
3-34	Hose clip 3/8"	2
3-35	Hose 3/8"	1
3-36	Throttle cable complete	1

Extension Handle Kit

Part Number	Description	QTY
1-14	Pull-out handle w/rubber grip	2
1-15	Bolt	2

Filter Kit

Part Number	Description	QTY
5-1	Filter cover	1
5-2	Filter spring	1
5-3	Seal for filter cover	1
5-4	Filter element	1
5-5	O-ring ø3x22	1
5-6	Filter cup	1
5-7	O-ring ø3x60	1
5-8	Filter housing	1
5-9	Ventilation filter	1
5-10	Cover f/ventilation filter	1
5-11	Seal for filter cover	1
5-12	Hose clamp	1
5-13	Filter hose	1

Hydraulic Pump Kit

Part Number	Description	QTY
2-12	Hose fitting 3/4"x1/2"	1
2-13	Angle nipple 1/2"	1
2-17	Pump 8.3 ccm	1
2-18	Seal ring 1/2"	2
2-19	Banjo bolt 1/2"	1
2-20	Feed line w/banjo	1
2-29	Seal ring 3/4"	2
2-30	Hose fitting 3/4"x1/2"	1
2-31	Hose fitting 3/4"x1/2"	1
2-32	Cooler pressure hose	1

Cooling and Fan Kit

Part Number	Description	QTY
2-21	Nut M14x1.5	1
2-22	Spring washer M14	2
2-23	Fan ø280-6	1
2-24	Screw M8x110	4
2-25	Washer M8	8
2-26	Cooler complete	1
2-27	Centering washer	1
2-28	Screw 5/16" UNFx25	4
2-29	Seal ring 3/4"	2



Contact:

Hours: Monday-Friday 8 AM to 5 PM EST

Address: 344 Kendall Rd, Blairsville, PA 15717

Phone: (702) 293-4262

For Sales Email: sales@titanpostdrivers.com

For Service Email: service@titanpostdrivers.com

Maintenance Records and Notes:

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

