



Operator's Manual

PHD6400



Table of Contents

Introduction.....	3
Safety Warnings	4
Operating Instructions.....	6
Connecting to Hydraulic Power Source.....	7
Safe Starting.....	8
Driving a Post.....	10
Installing Barrels.....	11
Service and Maintenance.....	12
Technical Data.....	13
Troubleshooting.....	15
Warranty.....	16
Exploded View.....	18
Part Kits.....	22

Introduction

Thank you for choosing a Titan Hydraulic-Powered Post Driver. 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 your Titan Post Driver.

This post driver is powered by an external hydraulic source. Ensure you consult the operator's manual for your hydraulic source to ensure safe and effective operating procedures are being followed. Details for proper hydraulic flow can be found in the technical data section of the manual. Keep both manuals with your machine for reference by all operators. Follow all recommended maintenance for both the Titan Post Driver and the hydraulic source.

Your Titan Post Driver 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 Post Drivers should be registered as soon as possible, to register your Titan Post Driver, 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 PHD6400 with 2 3/8 Round Adapter

Safety Warnings

- 1) **Operators:** All operators must understand the safety precautions and operating procedures described in this owner's manual before using the PHD6400 post driver. Keep this operator's manual with the driver for reference by all operators. Never let children or untrained people operate the driver.
- 2) **Operation:** Turn the driver off when not in use to prevent unauthorized use.
- 3) **Operation:** Do not leave the post driver unattended when connected to the hydraulic source.
- 4) **Operation:** Do not use the Titan Post Driver for any purpose other than driving posts or rods into the ground. Misuse may result in serious injury to yourself or others, as well as damage to your driver or other surrounding property.
- 5) **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, or click on www.clickbeforeyoudig.com, or check with your local authorities to request this service.
- 6) **Driving posts or rods into an underground utility line can be extremely dangerous.** Severe or life-threatening personal and property damage can occur. Be absolutely certain you know where the underground utilities are located. Underground utilities that may be present include, but are not limited to:
 - Electric
 - Gas
 - Telephone
 - Water
 - Sewer
 - TV Cable
 - Lawn Sprinkler Lines
- 7) **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
- 8) **PPE:** Bystanders should also wear PPE, especially eye and ear protection. Otherwise, bystanders should maintain adequate distance from the operating area to avoid injury.
- 9) **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
- 10) **Operation:** Only use the post driver for its intended use, as described in the *Introduction* section.
- 11) **Operation:** While operating the driver, do not smoke, eat, chat, or perform any other activity that can affect maintaining control over the driver.
- 12) **Operation:** Maintain balance while handling and operating the driver. Always use two hands while operating the driver.
- 13) **Operation:** Do not engage the throttle except when the driver is firmly seated on a post. Failure to follow this can lead to 'dry fire' issues and will void your warranty.
- 14) **Hydraulic Source:** Only use approved hydraulic hoses to connect to the source.
- 15) **Maintenance:** For a proper grip, keep the driver handles dry and clean.
- 16) **Maintenance:** Before every use, be sure to inspect your driver for loose hardware and tighten as needed.
- 17) **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.

Operating Instructions

Your Titan Post Driver is designed to be as effective and efficient as possible, while being extremely powerful and lightweight. It is very important to understand that your post driver is a powerful machine. With proper use and maintenance, your Titan Post Driver 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 and every 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 Post Driver.

The Titan Hydraulic-Powered Post Driver requires the use of an auxiliary hydraulic power source. The driver is designed for use at a certain oil flow, working pressure, and maximum pressure. Use at a flow rate or pressure that is too high results in an overload of the driver leading to a decrease in the lifespan of the driver and costly repairs.

Always keep the driver square to the post when driving.

Be sure to read and understand the starting instructions for the hydraulic source.

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

For optimum performance and to prevent the potential for dry-fire or misfire, please follow these guidelines:

ALWAYS maintain down-pressure while driving a post.

ALWAYS keep the driver square to the post while driving.

ALWAYS use the correct barrel or accessory for the type of post you are driving.

DO NOT allow the barrel of the driver to come in contact with the ground while driving.

DO NOT push the throttle unless the driver is loaded on the post.

Continual dry-fire or misfire will cause damage to your driver, which will not be covered under the terms of the warranty.

Visually check the anvil and the barrel. Look up into the barrel for excessive debris or foreign objects.

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

DO NOT use your Titan Post Driver 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 Power Source

The post driver can be connected to various hydraulic power sources, such as excavators, trucks, loaders, tractors etc., and of course Titan power packs, the design of which ensures your new Titan post driver the absolute best working conditions.

It is important that the post driver is not subjected to an oil flow and a working pressure beyond its design capability. Please refer to the ID-tag on the post driver 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 2320 psi (160 bar)
- The internal diameter of the hoses is sufficient (min. ½")
- All couplings are clean



- The power source is equipped with an oil filter of min. 25 Micron

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

If the output of the power source is too high:

- The power source must be adjusted to correct output
- You can choose to mount a Titan oil flow divider to protect the post driver against overload
- You can choose one of our Titan power packs.

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

Safe Starting

Place the machine on a secure, solid surface in an open area. Maintain a safe posture and balance. **DO NOT** start the driver anywhere except in an open, well-ventilated area. Never use your machine inside an enclosed building.

Ensure that the proper barrel is installed on the driver.

Connect hydraulic hoses to the driver and power pack. **ALWAYS** connect the hoses to the post driver and hydraulic source before starting the sources hydraulic pump. Ensure quick couplings are clean before connecting the hoses.

Start the pump on the hydraulic power source.

The driver is seated firmly on the post.

Pull the trigger to start the driver. If using a remote start ensure the remote start valve is set to the off position before starting the pump. Using the included screw (M8) to lock the driver trigger into the on position.



Once the driver is firmly on the post move the valve to the on position. **CAUTION** must be used when utilizing the remote trigger to ensure the driver is safely used.

Driving a Post

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

Start the engine safely as outlined on the previous page.

Take a firm stance with weight evenly distributed on both feet. Keep both feet securely planted at a minimum of shoulder width apart. **ALWAYS** maintain a solid balance while driving posts.

Lift the post driver onto the post, then ensure that the driver is level with the post and the post is centered up in the barrel of the post driver. To keep the driver square to the post, use the correct adapter sleeve. If not aligned properly, you could cause damage to the machine or your post. See Figure 1.

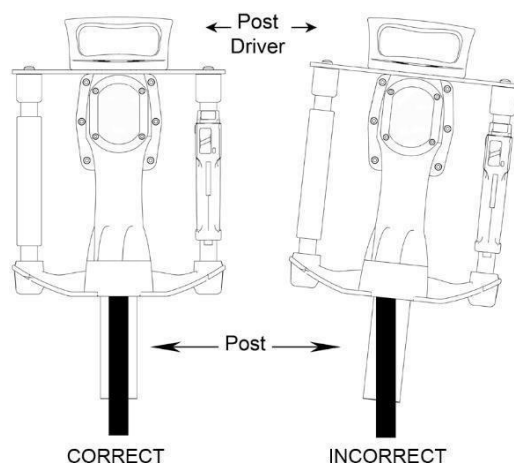


Figure 1: Post driver level/square example

Pull down on the machine handles to apply approximately 10-12 pounds of down-pressure to help the internal hammer mechanism remain in the correct operating position. Once you are confident that the machine is being held level and the post is centered, gently engage the throttle trigger until the hammer action is felt.

When you are sure the post is moving down into the ground correctly, depress the throttle trigger fully, and drive your post down to the desired depth. **ALWAYS** keep both hands on the driver and maintain the 10-12 pounds of down-pressure while driving the post into the ground.

Be sure the barrel of the driver does not come in contact with the ground. This will take the down-pressure off the machine and may cause unnecessary damage to your driver.

When the post is at the desired depth, fully release the throttle trigger and gently slide the machine off the post. Move to the next post and repeat the above procedure. ALWAYS fully release the throttle trigger to stop the hammer action prior to removing from the post. You can leave the hydraulic pump idling; there is no need to repeatedly turn the pump on and off.

Installing Barrels

Line the barrel up to the bottom of the driver so that the mounting holes on the barrel are aligned with the bottom of the driver.



Using two 19mm wrenches tighten the two included bolts to attached the barrel.



Service and Maintenance

Proper maintenance of your Titan Hydraulic Post Driver is necessary for its long-term use.

Daily Maintenance

Check Hoses

Check couplings and clean carefully

Yearly Maintenance

Check Accumulator

Technical Data

Please attached technical data for you post driver.

PHD6400

		Post Driver
Weight Post Driver	lbs	61
Service weight incl. adaptor and hoses	lbs	66
Dimensions w/o hose and adaptor (WxDxH)	in	9 x 7.5 x 26
EHTMA category		D
Oil flow	G.P.M	8
Working pressure	psi	1750
Max. setting pressure relief valve	psi	2300
Max. return pressure	psi	220
Blow frequency	1/min.	1380
Blow energy	Joule	95
Max. oil temperature	F°	160
Accumulator charging pressure	psi	730
Cooling capacity needed	kW	3
Vibration level 3 axis (ISO 20643)	dB	139
Uncertainty (K)	dB	123
Sound pressure level (L _{PA}) 1 m	dB	96
Sound power level (L _{WA}) guaranteed	dB	108

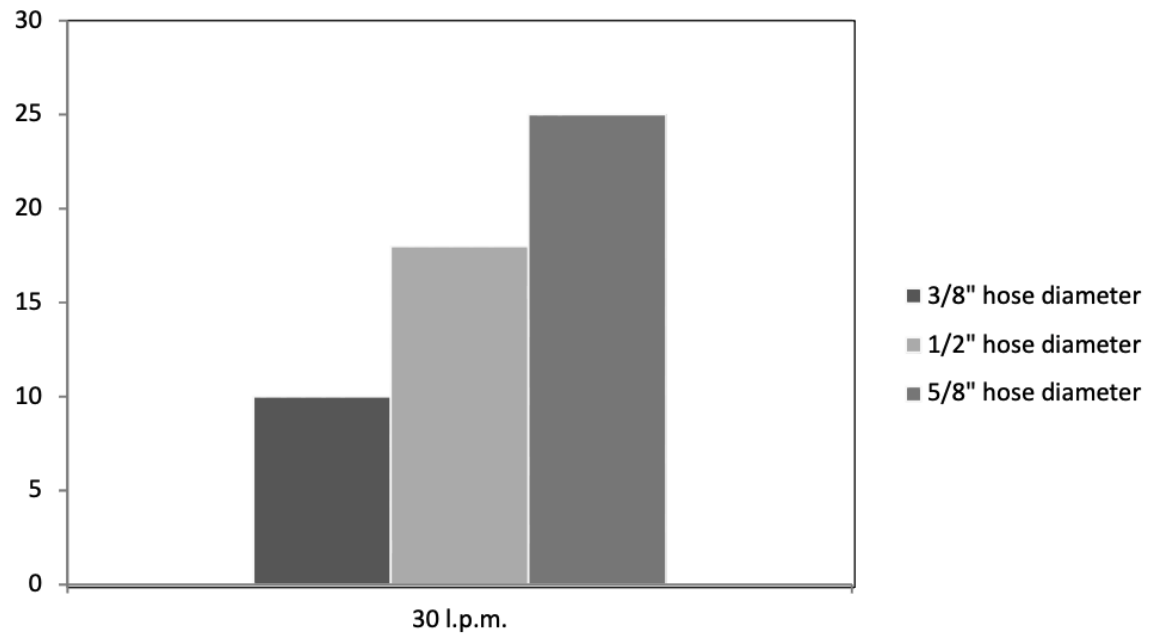
Oil

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	

Performance Chart

Maximum length of different size hoses.



Pressure from power pack: 150 bar., Flow: 30 l.p.m., zero elevation, 2 set couplings per 10 m hose.

Troubleshooting

Before you start locating faults, check that the oil flow from the power source is correct and that the pressure relief valve is set correctly. Follow the instructions in the workshop manual of the power source.

Problem	Cause	Solution
Post driver does not start, and there is <i>no</i> pressure in P-hose	Trigger mechanism does not actuate trigger piston correctly	Dismount top cover, and check and adjust functioning.
Post driver does not start, and there <i>is</i> pressure in P-hose	Striking piston is stuck in cylinder	Nose part is tightened too hard. Seizing between cylinder and striking piston. Polish or replace components.
	Defective Q.R. coupling	Check Q.R. coupling
	Oil supply is made to T-connection	Switch pump and tank line
Adaptor cannot get a grip around the post during operation	Adaptor is damaged	Replace parts.
	Wrong adaptor size	Replace adaptor to right size.
Post driver works irregularly	Impurities in hydraulic oil	Replace oil and oil filter
	Oil level in power source too low	Add hydraulic oil
	Wrong adaptor size or worn-out anvil	Check
Bad performance	Internal leak	Dismount valve housing and replace O-rings.
	Oil flow from the power source is not correct for the post driver	Check oil flow
	Accumulator pressure too low	Charge with Nitrogen.
	Defective diaphragm	Replace diaphragm
	Defective Q.R. coupling	Check Q.R. coupling
	Return pressure too high	Check power source/hoses
	Hose diameter too small	Check hoses

If these steps do not address your issue, call Titan Post Drivers at (702) 293-4262 for further assistance.

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 post driver 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 Post Driver, 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
 3. Barrel of driver from incorrect use of machine
 4. Titan Post Drivers sleeves/accessories

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

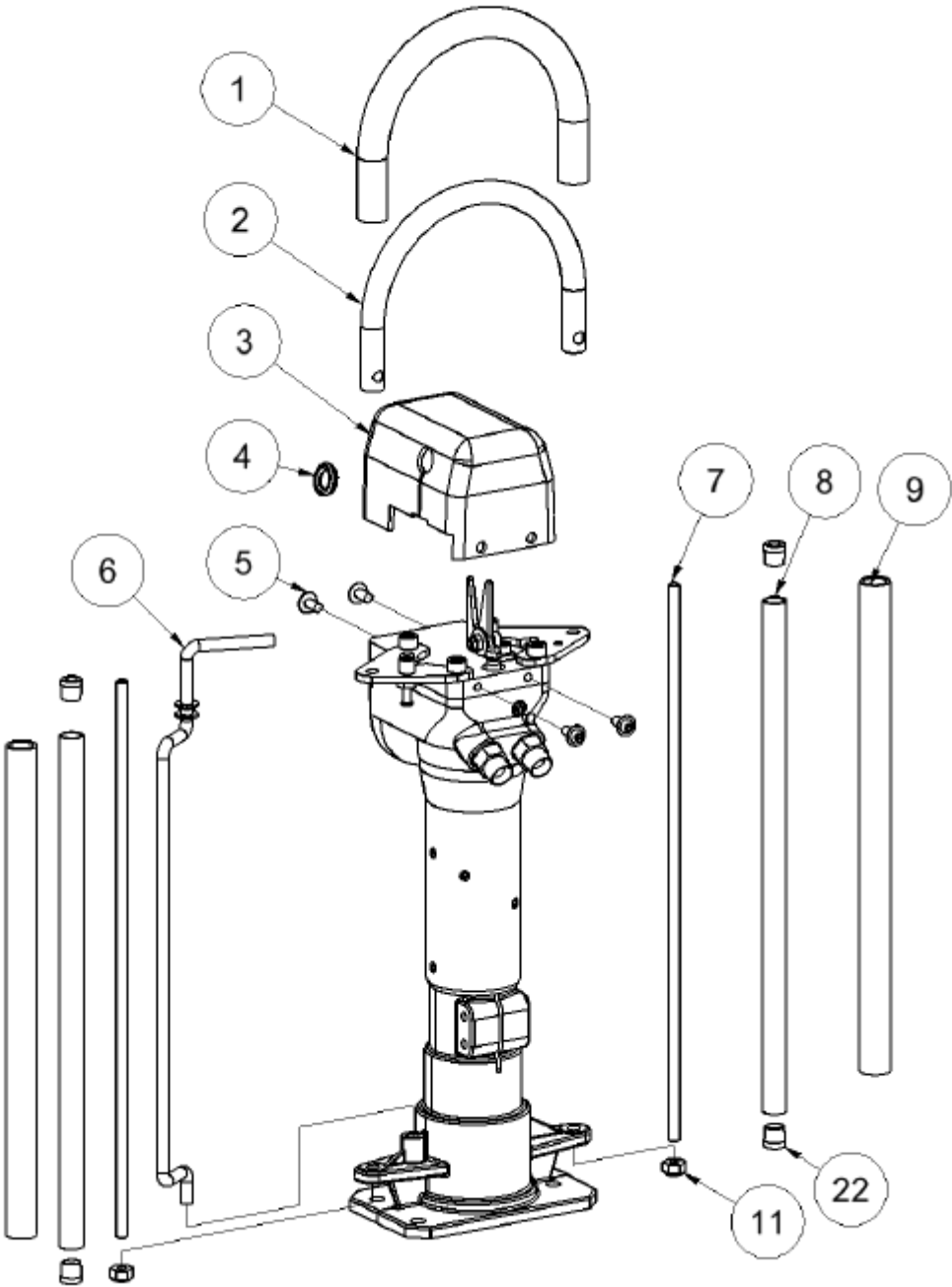


Fig. 2

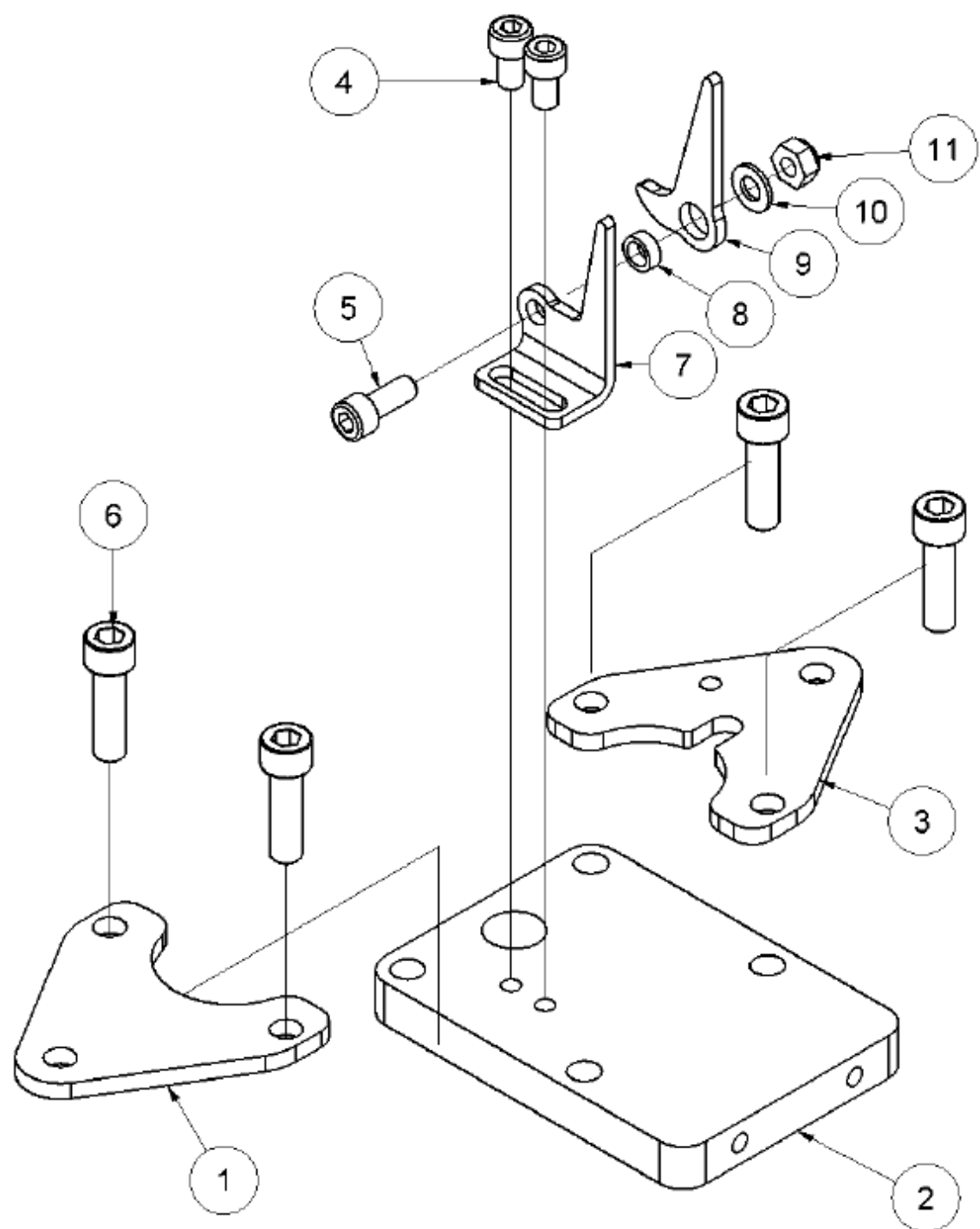


Fig. 3

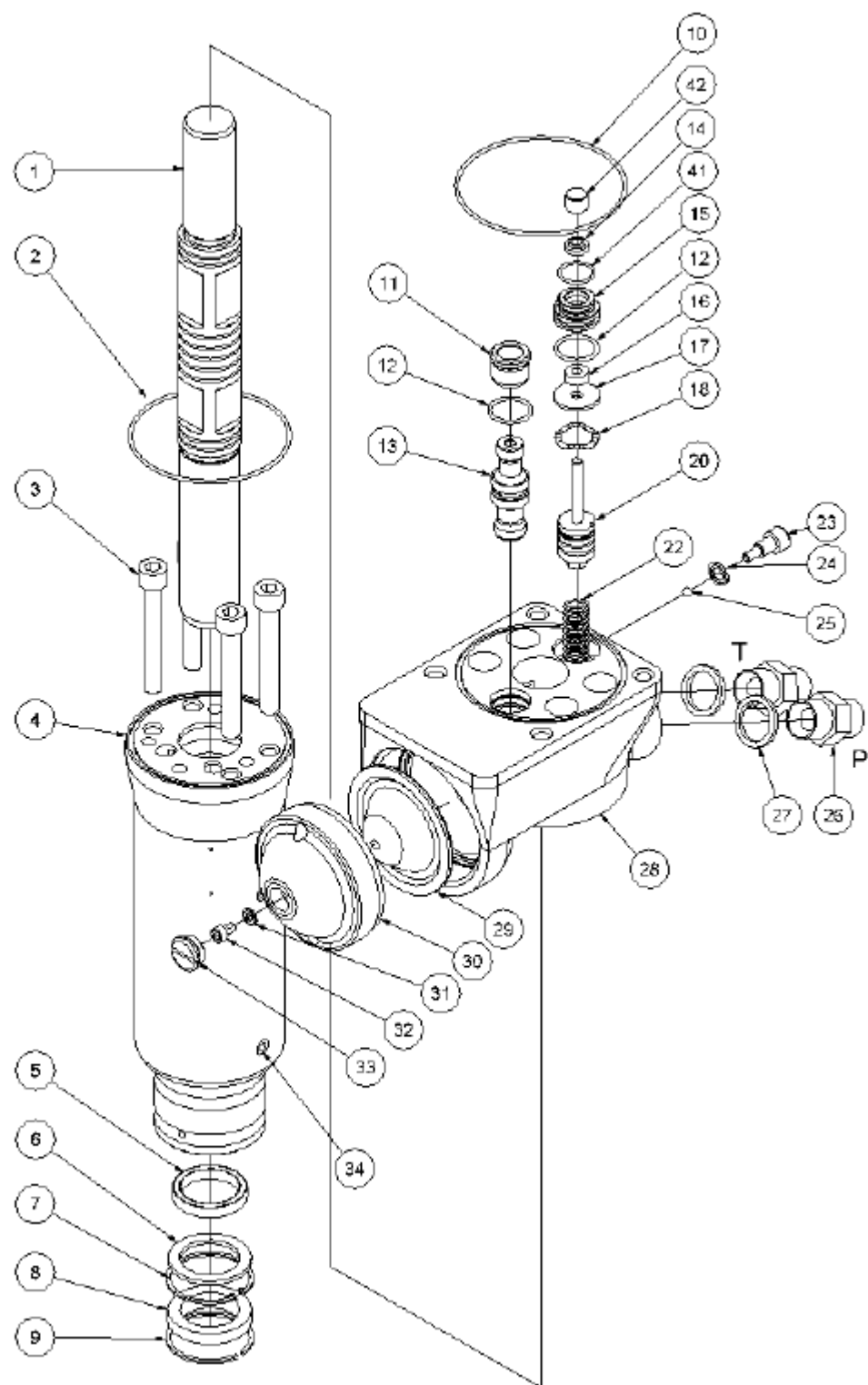
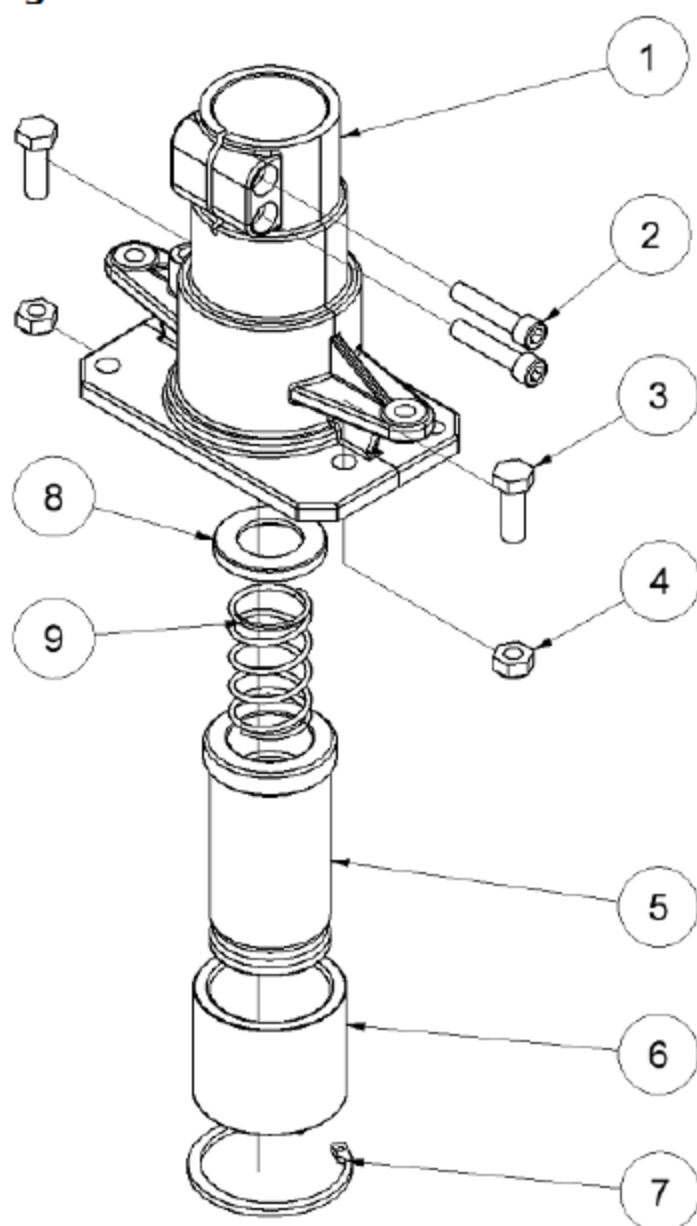


Fig. 4



Part Kits

Valve Housing Kit

Part Number	Description	QTY
2-2	Top plate	1
3-3	Screw M10x70	4
3-10	O-ring 88x2	1
3-11	Sleeve	1
3-12	O-ring 20x2	2
3-13	Spool HH23/HH25 30 l.p.m.	1
3-14	Seal	1
3-15	Seal housing	1
3-16	Seal	1
3-17	Washer	1
3-18	Crinkled spring washer 23.8x17.3x0.3	1
3-20	Trigger piston complete	1
3-22	Compression spring 1.25x12.5x62.5	1
3-23	Screw M8 f/lock nut	1
3-24	Seal ring M8	1
3-25	Ball ø5 mm	1
3-26	Fitting 1/2"x1/2" BSP	2
3-27	Seal ring 1/2"	2
3-28	Valve housing	1
3-29	Diaphragm	1
3-30	Accumulator cover	1
3-31	Seal ring M5	1
3-32	Screw M5 f/accumulator	1
3-33	Plug	1
3-41	O-ring 17x1.5	1
3-42	Distance piece	1

Anvil Kit

Part Number	Description	QTY
4-2	Screw M10x50	2
4-5	Anvil	1
4-6	Bushing	1
4-7	Retaining ring 80x4	1
4-8	Spring guide	1
4-9	Spring	1

Accumulator Kit

Part Number	Description	QTY
3-10	O-ring 88x2	1
3-11	Sleeve	1
3-12	O-ring 20x2	2
3-13	Spool HH23/HH25 30 l.p.m.	1
3-23	Screw M8 f/lock nut	1
3-24	Seal ring M8	1
3-25	Ball ø5 mm	1
3-29	Diaphragm	1
3-30	Accumulator cover	1
3-31	Seal ring M5	1
3-32	Screw M5 f/accumulator	1
3-33	Plug	1

Trigger Kit

Part Number	Description	QTY
1-1	Handle Cover	1
1-2	Top handle	1
1-6	Trigger lever	1
1-7	Threaded rod	2
1-8	Handle (435.5 mm)	2
1-9	Handle cover	1
1-11	Nut M10	2
1-22	Guide bushing	4
2-1	Handle plate left	1
2-2	Top plate	1
2-3	Handle plate right	1
2-4	Screw M8x14	2
2-5	Screw M8x20	1
2-6	Screw M10x35	4
2-7	Trigger bracket	1
2-8	Distance bushing	1
2-9	Trigger plate	1
2-10	Washer M8	1
2-11	Lock nut M8	1

Cylinder Piston Kit

Part Number	Description	QTY
3-1	Striking piston	1
3-2	O-ring 82x2	1
3-3	Screw M10x70	4
3-4	Cylinder	1
3-5	Seal ø32/ø40x6	1
3-6	Supporting washer ø32.7x45x2.5	1
3-7	Retaining ring	1
3-8	Rod wiper	1
3-9	Spring ring	1
3-34	Pipe plug 1/8"	4

Nose Kit

Part Number	Description	QTY
4-1	Nose part	1
4-2	Screw M10x50	2
4-3	Screw M12x35	2
4-4	Lock nut M12	2

Top Cover Kit

Part Number	Description	QTY
1-3	Top cover	1
1-4	Rubber grommet	1
1-5	Screw M8x16	4

Diaphragm Kit

Part Number	Description	QTY
3-29	Diaphragm	1
3-31	Seal ring M5	1
3-32	Screw M5 f/accumulator	1
3-33	Plug	1



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.

