

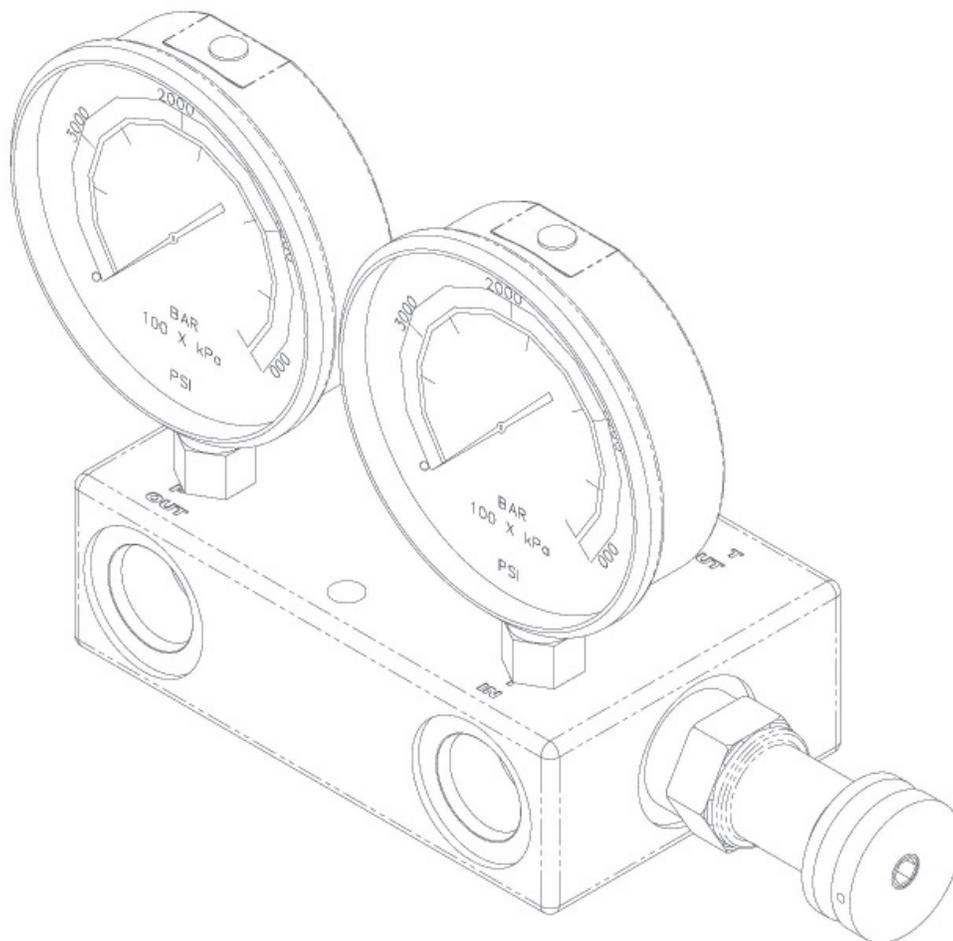


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Owner's Manual
Parts Manual
Safety Precautions
Operating Instructions

Printed in the USA

IN-LINE RELIEF PRESSURE DIFFERENTIAL KIT (3000 PSI AND 5000 PSI MODELS)



PREFACE

This manual is used to familiarize you with safety, assembly, operation, adjustment, troubleshooting, and maintenance. Read and follow the recommendations in this manual to ensure safe and efficient operation. The information contained in this manual was current at the time of printing. Some items may change slightly to assure you the customer, the best performance.

We want you to be completely satisfied with your new product, feel free to contact your local Authorized Service Dealer for help with service, replacement parts, or any other information you may require.

Whenever you contact your Authorized Service Dealer or the factory, always have the model number and serial number of your product available. These numbers will help provide exact information about your specific product. You will find the model and serial numbers on an ID plate located on the product.

For your convenience, write the product model number, serial numbers, and date of purchase in the spaces below.

MODEL NO:	_____
SERIAL NO:	_____
DATE of PURCHASE:	_____

TABLE OF CONTENTS

Preface / Table of Contents	2
Safety Statements	3
General Precautions	4
Operating Instructions	5
3000 PSI Kit Parts Breakdown	6
5000 PSI Kit Parts Breakdown	7

SAFETY STATEMENTS

DANGER



THIS STATEMENT IS USED WHERE SERIOUS INJURY OR DEATH WILL RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.

WARNING



THIS STATEMENT IS USED WHERE SERIOUS INJURY OR DEATH COULD RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.

CAUTION



THIS STATEMENT IS USED WHERE MINOR INJURY COULD RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.



THIS SYMBOL BY ITSELF OR USED WITH A SAFETY SIGNAL WORD THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY OR THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

WARNING



READ MANUAL PRIOR TO INSTALL

Improper installation, operation, or maintenance of the equipment could result in serious injury or death. Operators and maintenance personnel should read this manual as well as all manuals related to this equipment. **FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL.**

WARNING



READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing or operating this equipment.



KNOW YOUR EQUIPMENT

Know your equipment's capabilities, dimensions and operations before operating. Visually inspect your equipment before you start, and never operate equipment that is not in proper working order with all safety devices intact. Check all hardware to assure it is tight. Make certain that all locking pins, latches, and connection devices are properly installed and secured. Remove and replace any damaged, fatigued or excessively worn parts. Make certain all safety decals are in place and are legible. Keep decals clean, and replace them if they become worn and hard to read.

WARNING



DO NOT MODIFY EQUIPMENT

Modifications may weaken the integrity of the equipment and may impair the functions, safety, life, and performance of the equipment. When making repairs, use only the manufacturer's genuine parts, following authorized instructions. Other parts may be substandard in fit and quality.

GENERAL PRECAUTIONS



PREPARE FOR EMERGENCIES

- Be prepared if a fire starts.
- Keep a first aid kit near by when operating equipment.

WARNING



OPERATOR SAFETY

- Protective clothing and equipment should be worn at all times.
- Wear protective clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- Prolonged exposure to excessive noise can cause hearing loss. Wear suitable hearing protection such as ear plugs.
- Operating equipment safely requires the full attention of the operator. Avoid distractions.
- Do not operate the unit when you are tired, ill or under the influence of alcohol, drugs or medication.
- Never let a minor or inexperienced person operate the unit.

CAUTION



PRODUCT SAFETY

- Inspect the entire product before operation.
- Replace parts that are cracked, chipped or damaged in any way before operation.
- Keep others away when making any adjustments to the unit.

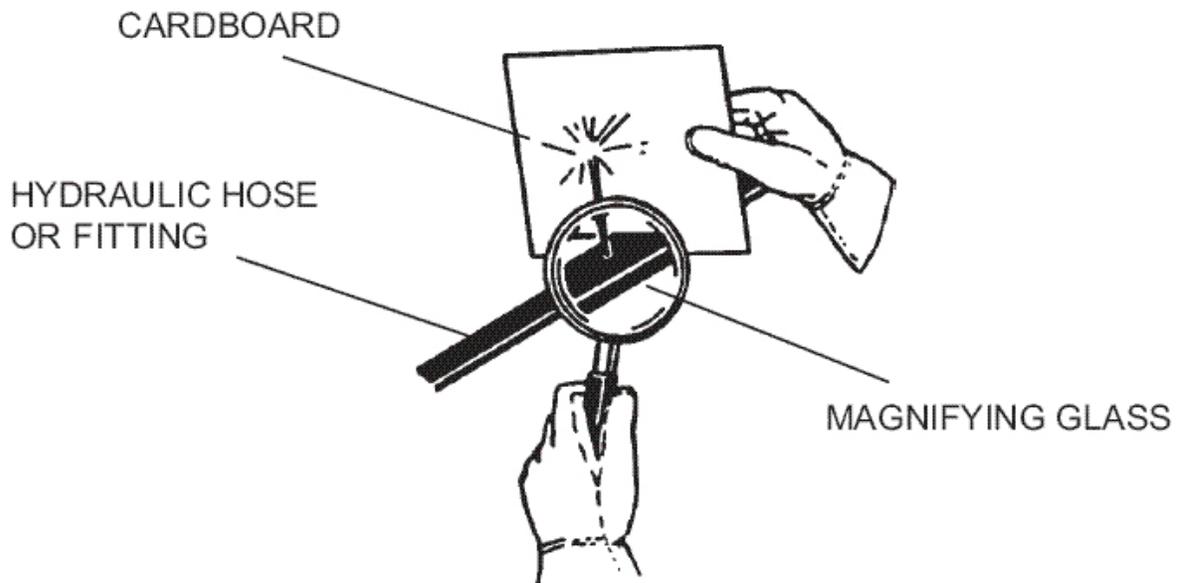
WARNING



USE CARE WITH HYDRAULIC FLUID PRESSURE

Hydraulic fluid under pressure can penetrate the skin and cause serious injury or death. Hydraulic leaks under pressure may not be visible. Before connecting or disconnecting hydraulic hoses, read your prime mover's operator's manual for detailed instructions on connecting and disconnecting hydraulic hoses or fittings.

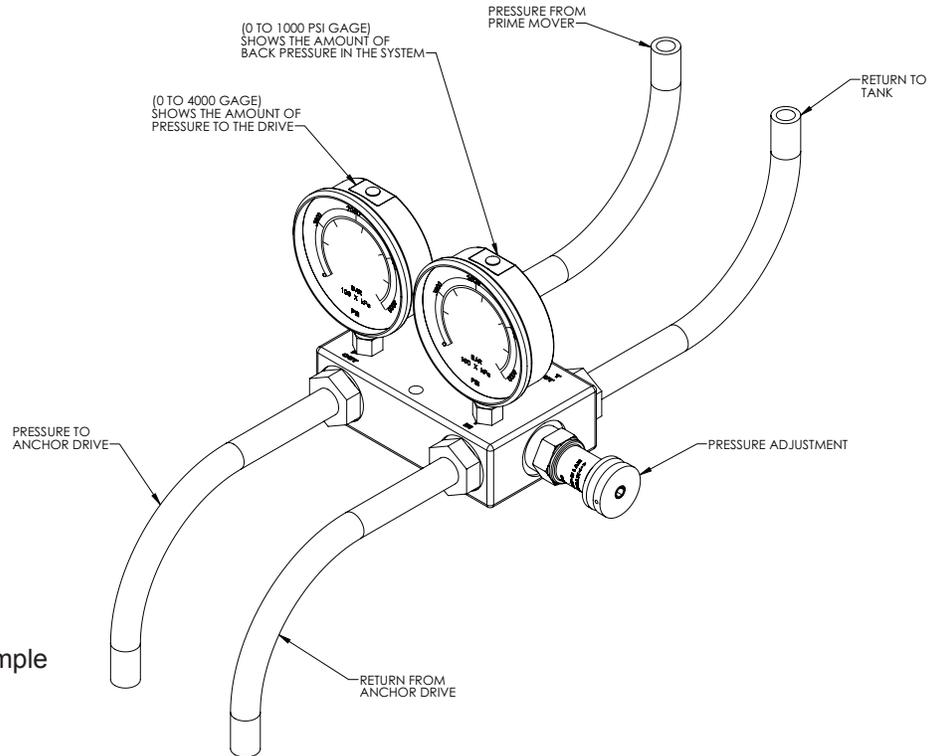
- Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.
- If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research it immediately to determine proper treatment.
- Wear safety glasses, protective clothing, and use a piece of cardboard or wood when searching for hydraulic leaks. **DO NOT USE YOUR HANDS! SEE ILLUSTRATION.**



OPERATING INSTRUCTIONS

CONNECTING TO THE POWER SOURCE:

Connect the pressure hose from the parent machine (power source) to the port marked "P-IN".
Connect the port marked "P-OUT" to the pressure side of the drive motor.
Connect the tank hose from the parent machine (power source) to the port marked "T-OUT".
Connect the port marked "T-IN" to the tank side of the drive motor.



3000 PSI Kit Shown in Example

SETTING THE DESIRED PRESSURE:

With the In-Line / Pressure Differential Kit (ILPD) connected to the pressure and tank hoses, start the parent machine or power source and engage the hydraulic system to pressurize the ILPD.

Observe the PSI reading on the HIGH pressure gage.

To **INCREASE** the desired PSI turn the adjusting screw **CLOCKWISE** until the desired pressure is obtained.

To **DECREASE** the desired PSI turn the adjusting screw **COUNTER CLOCKWISE** until the desired pressure is obtained.

READING THE PRESSURE DIFFERENTIAL:

To obtain the actual pressure being utilized by the planetary drive unit.

1. Read the HIGH pressure gage.
2. Read the LOW pressure gage.
3. Subtract the LOW pressure reading from the HIGH pressure gage.
4. The new value (difference balance) is the **ACTUAL** working pressure being used.

The pressure difference reflects the back pressure on the planetary drive. This back pressure causes a reduction in the actual output of the planetary drive.

Example: 2500psi (HIGH) - 200psi (LOW) = 2300psi Actual working pressure.

3000 PSI KIT PARTS BREAKDOWN (660713)

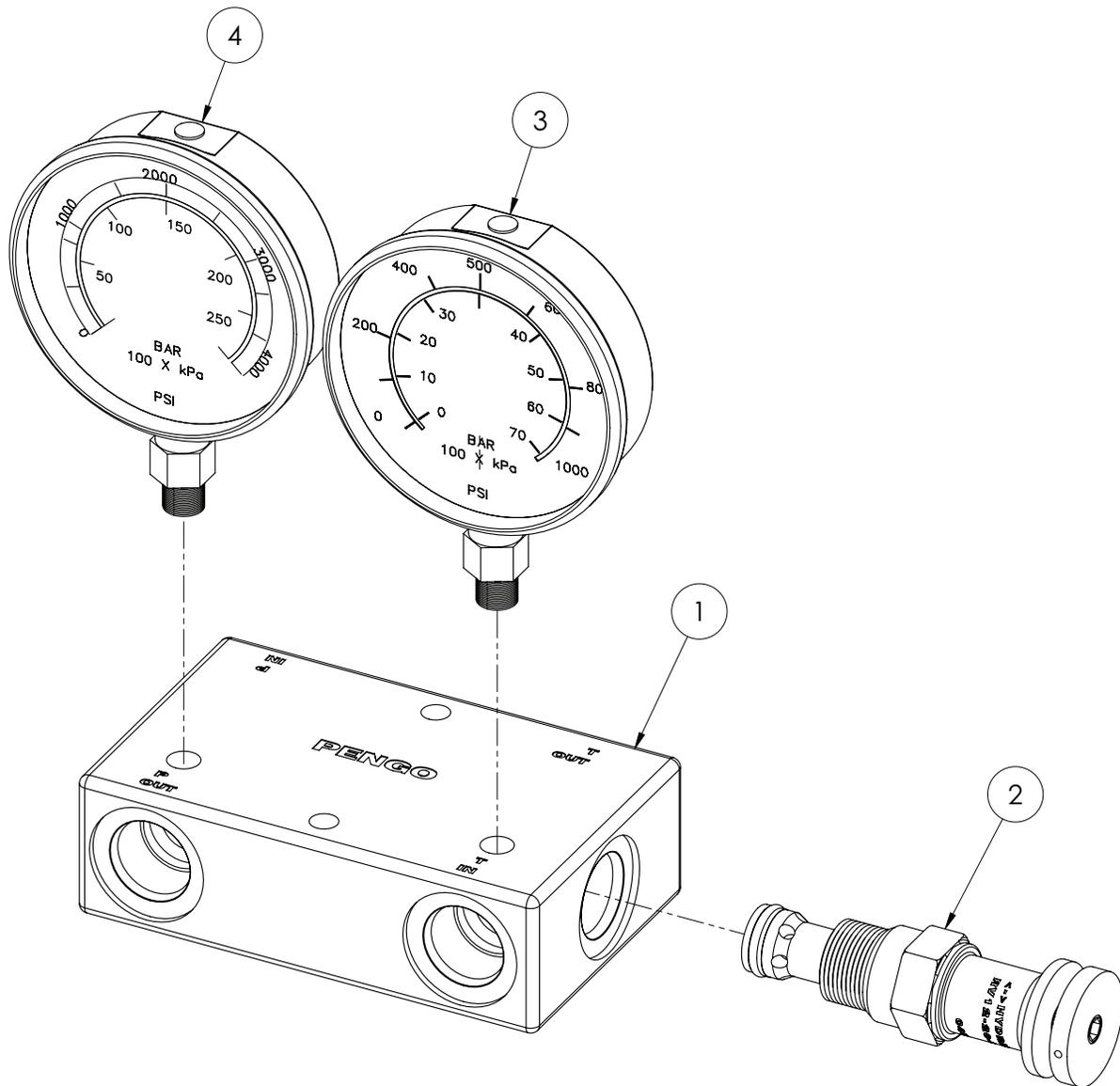


Figure 1

ITEM	PART No.	QTY	DESCRIPTION
1	660709	1	BLOCK VALVE 3000 PSI (ALUMINUM)
2	660710	1	CARTRIDGE VALVE (HYDRAFORCE RV12-26)
3	660711	1	GAGE 0 - 1000 PSI
4	660712	1	GAGE 0 - 4000 PSI

5000 PSI KIT PARTS BREAKDOWN (660942)

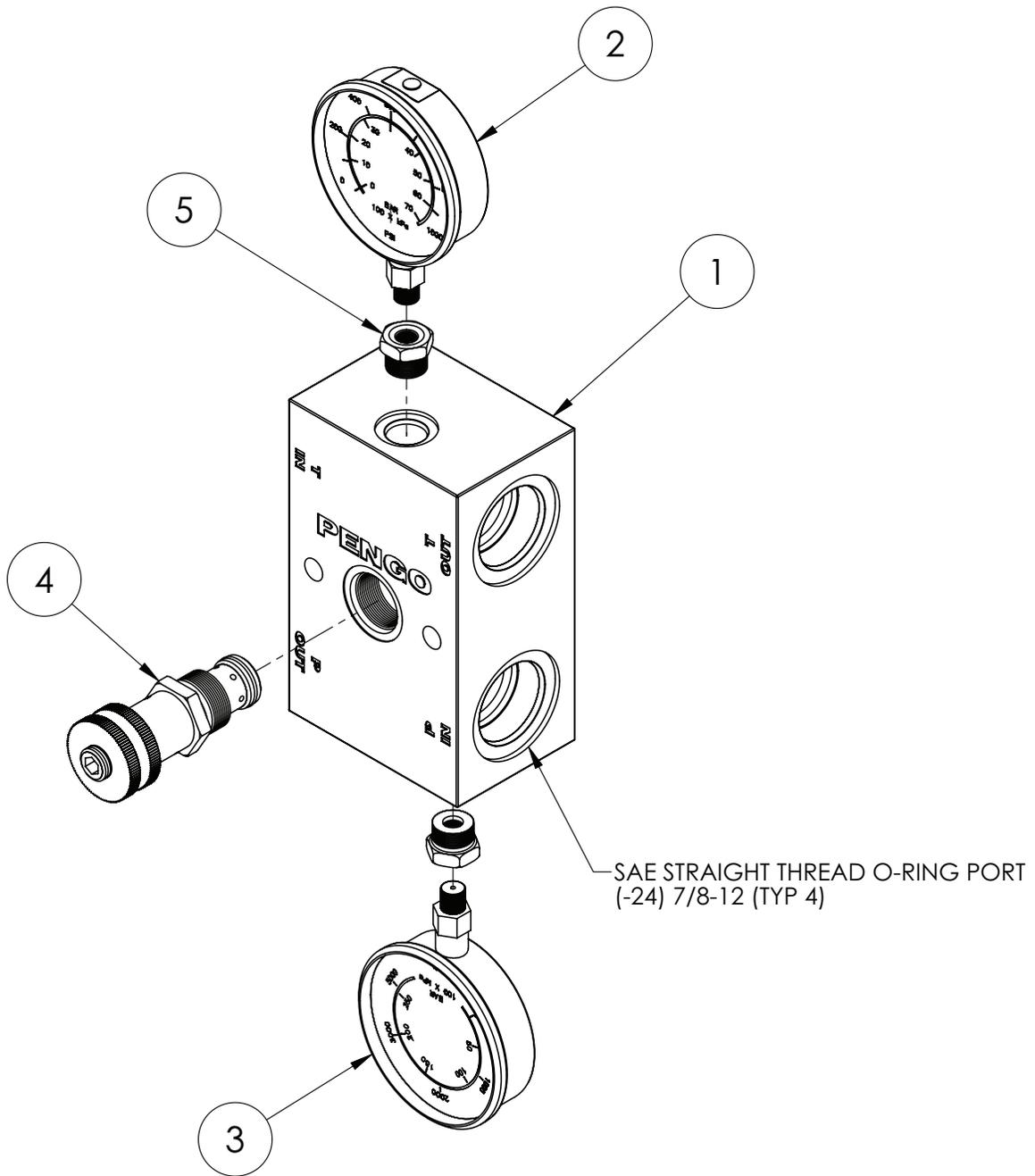


Figure 2

ITEM	PART No.	QTY	DESCRIPTION
1	660945	1	BLOCK VALVE 5000 PSI (STEEL)
2	660711	1	GAGE 0 - 1000 PSI
3	660943	1	GAGE 0 - 5000 PSI
4	660944	1	CARTRIDGE VALVE (VICKERS RV5-16-S-60)
5	660849	2	REDUCER STRAIGHT [MORB-FP]



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