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1 Introduction

1.1 Welcome

Congratulations on the purchase of your new ***Pneumatic Pipe Weight Compensator***. This unit is designed to provide you with years of outstanding performance. Simple maintenance and care will extend its life and insure a continuing level of excellent performance and reliability. This manual will assist you in giving your compensator the care it requires. Please read the manual and observe maintenance instructions. Replacement parts are readily available from FARR Canada in Edmonton Alberta. However, most of the parts that are subject to wear or damage are standard items likely to be found in supply stores or parts depots. Should you need replacement parts, or should you experience any difficulty not covered in this manual, please contact:

FARR CANADA

14755-121A Avenue

Edmonton, Alberta

Canada T5L 2T2

Phone: 780.453.3277

Fax: 780.455.2432

Email

Sales: support@farrcanada.com

Engineering: eng@farrcanada.com

Websites

<http://www.farrcanada.com>



1.2 About

This Unit is intended to hang a string of pipe in the derrick. Then adjust this string of pipe to the proper height for threading it into the box end of a pipe held in the slips and allow for downward movement while the threads are engaged and torque is applied to tighten the connection under controlled conditions.

This unit is hooked up to a standard air supply.

The air preparation unit will allow filtering and conditioning the air as it enters this circuit. It also allows setting the desired pressure for the circuit.

This air preparation unit is also equipped with a safety shutoff that, when engaged, doesn't allow to pressure up the circuit and decompresses the air in this circuit.

2 Operation

2.1 Operation

To move the cylinder up - fast - both levers ([Items 11 and 12](#)) have to get pulled at the same time. The cylinder moves up (fast) with the speed that the flow control valve at the upper end of the cylinder (00) will allow.

To move the cylinder down - fast - the lever with the center position ([Item 12](#)) has to get pushed. The cylinder moves down (fast) with the speed set at the flow control valve ([Item 6](#)) on the left-hand side of the stand.

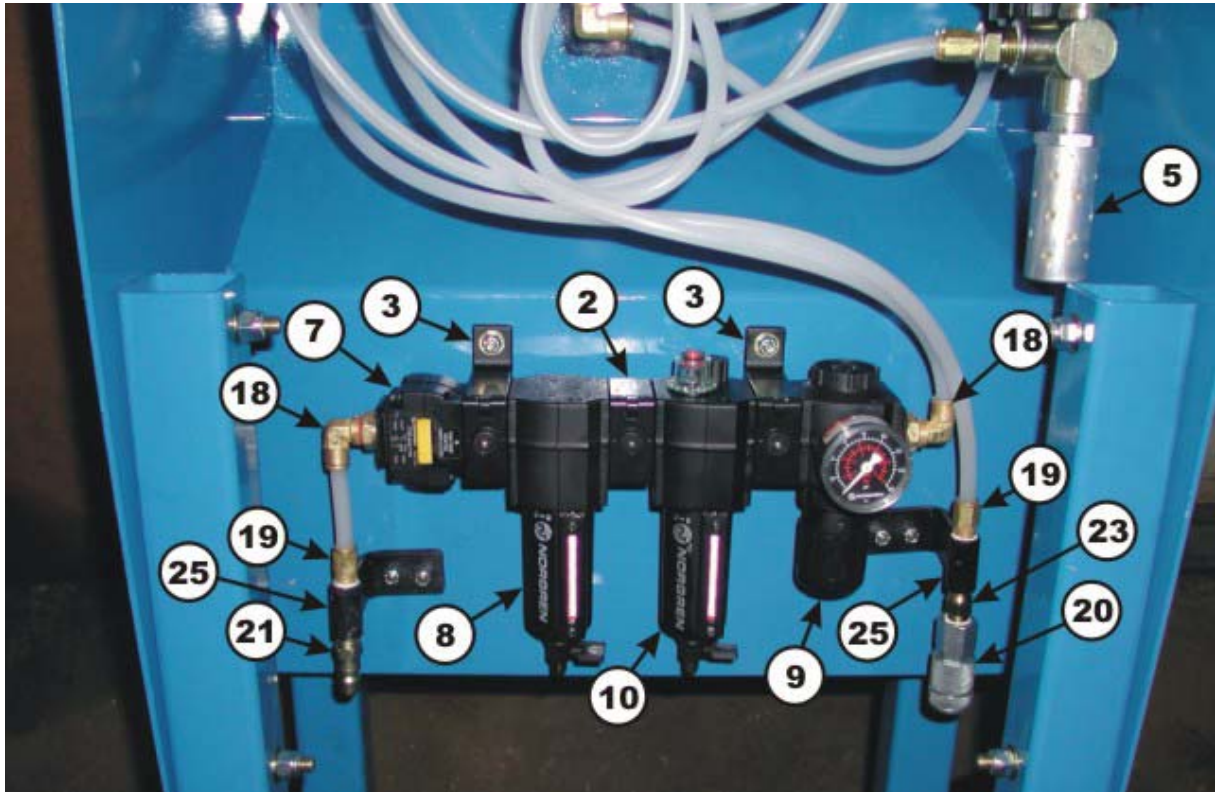
When the two levers on the stand are in neutral position the system is in float mode. The weight to be carried can be set with the pressure control valve ([Item 1](#)) on the right-hand side of the stand. The proper setting for floating the hanging string of pipe is where the pipe just doesn't move downwards anymore. The weight can be read on the gauge in the back of the stand.

The system has a silencer to reduce the emission of noise when the cylinder is down in fast mode. The cylinder has at its upper end a filter to prevent the contamination of the upper part of the cylinder. The flow control valve at the upper end of the cylinder determines the upward speed of the cylinder. In case of a line rupture it also controls the downward speed of the load.

With this unit the floating of the load is only in downward direction possible. This eliminates one source of errors for the torque reading when the connection is made up. In the upward direction no floating is required for that matter.

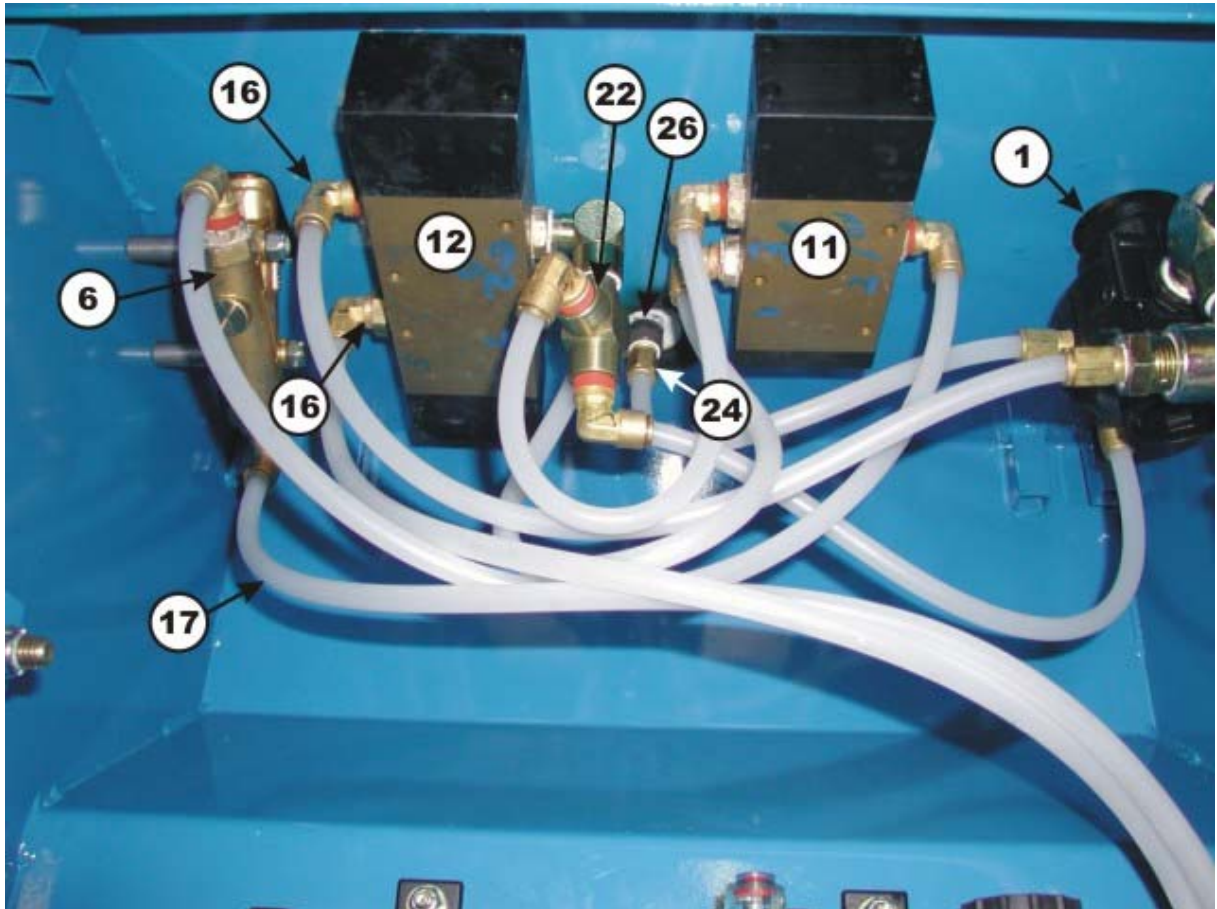
3 Parts List

3.1 Behind Cabinet



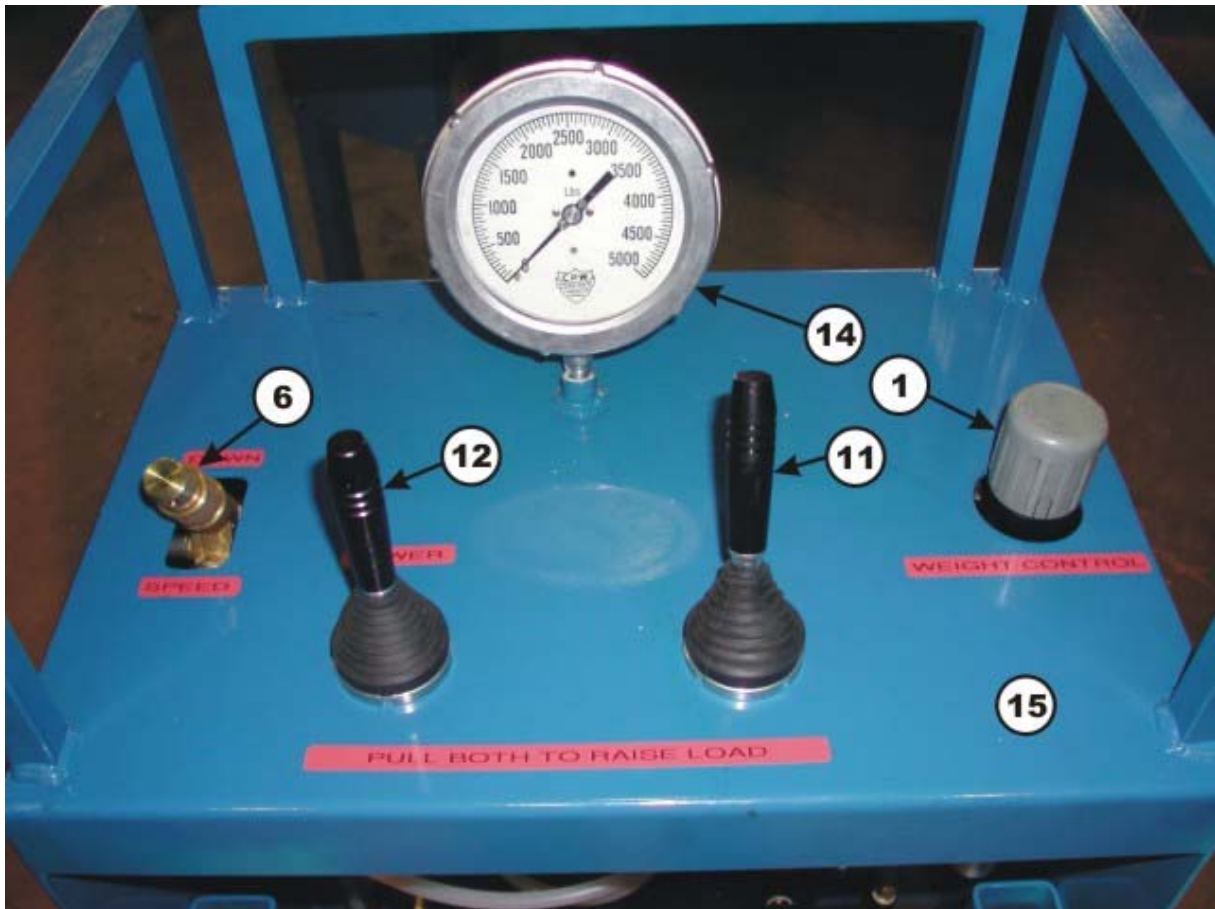
Item	Description	Part Number
2	Norgren Bracket 4314-51	08-1671
3	Norgren Bracket 4314-52	08-1672
5	Norgren Part MB004A	08-1674
8	Norgren Filter F73G4ANQD3	08-1677
9	Regulator R73G4AKRMG	08-1678
10	Oiler L73M4APQDN	08-1679
18	3/8"-90 Pneumatic Fitting	08-0385
19	3/8"-Straight Pneumatic Fitting	08-0384
20	Coupler Interchange	08-0067
21	Nipple Interchange	08-0057
23	Hex Nipple Adapter	08-0383
25	3/8" NPT 3000# Coupling	08-0374

3.2 Underside of Cabinet



Item	Description	Part Number
1	Regulator	08-1670
6	Norgren Part C839	08-1675
11	Lateral Valve Lever	08-1680
12	3 Position Lateral Valve Lever	08-1681
16	Reducer Ext Pipe/Int Pipe 8-6S	08-1678
17	Air Brake Plastic Tubing	08-9033
22	FPT Tee	08-0904
24	Norgren Fitting 1/4M NPT x 3/8" OD	08-9129
26	1/4" NPT 3000# Coupling	08-0373

3.3 Top Of Cabinet



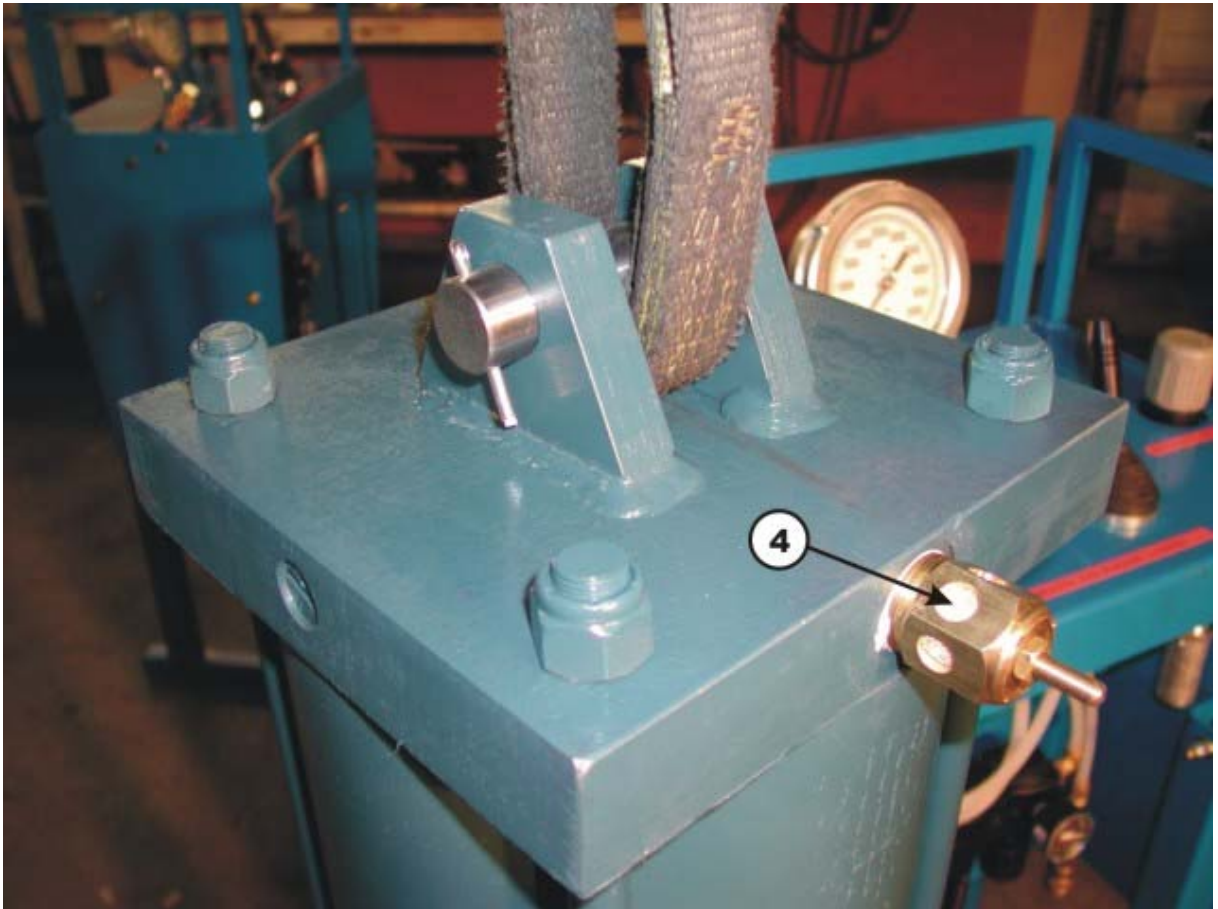
Item	Description	Part Number
1	Regulator	08-1670
6	Norgren Part C839	08-1675
11	Lateral Valve Lever	08-1680
12	3 Position Lateral Valve Lever	08-1681
14	4-1/2" 5000# Gauge	08-1683
15	Weight Compensator Stand	1497-100-00

3.4 Cylinder



Item	Description	Part Number
13	8" x 36" Air Cylinder w/ Female Eye End	08-1682

3.5 Cylinder Fittings 1



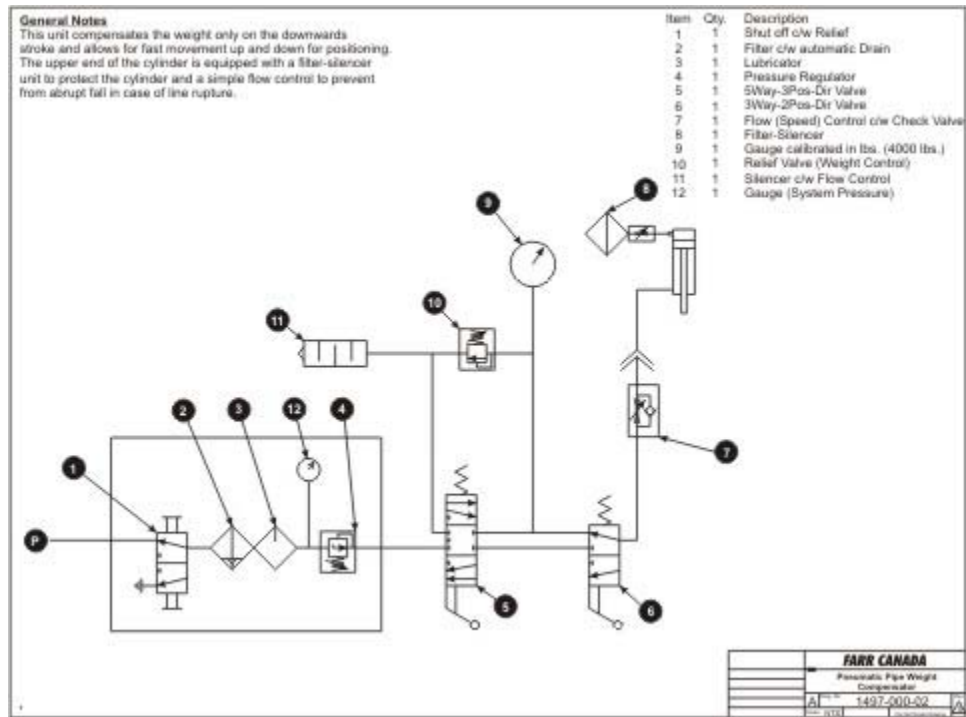
Item	Description	Part Number
4	Norgen Part MM006A	08-1673

3.6 Cylinder Fittings 2



Item	Description	Part Number
27	Ext Pipe 6-6S Fitting	08-9047

3.7 Hydraulic Schematic

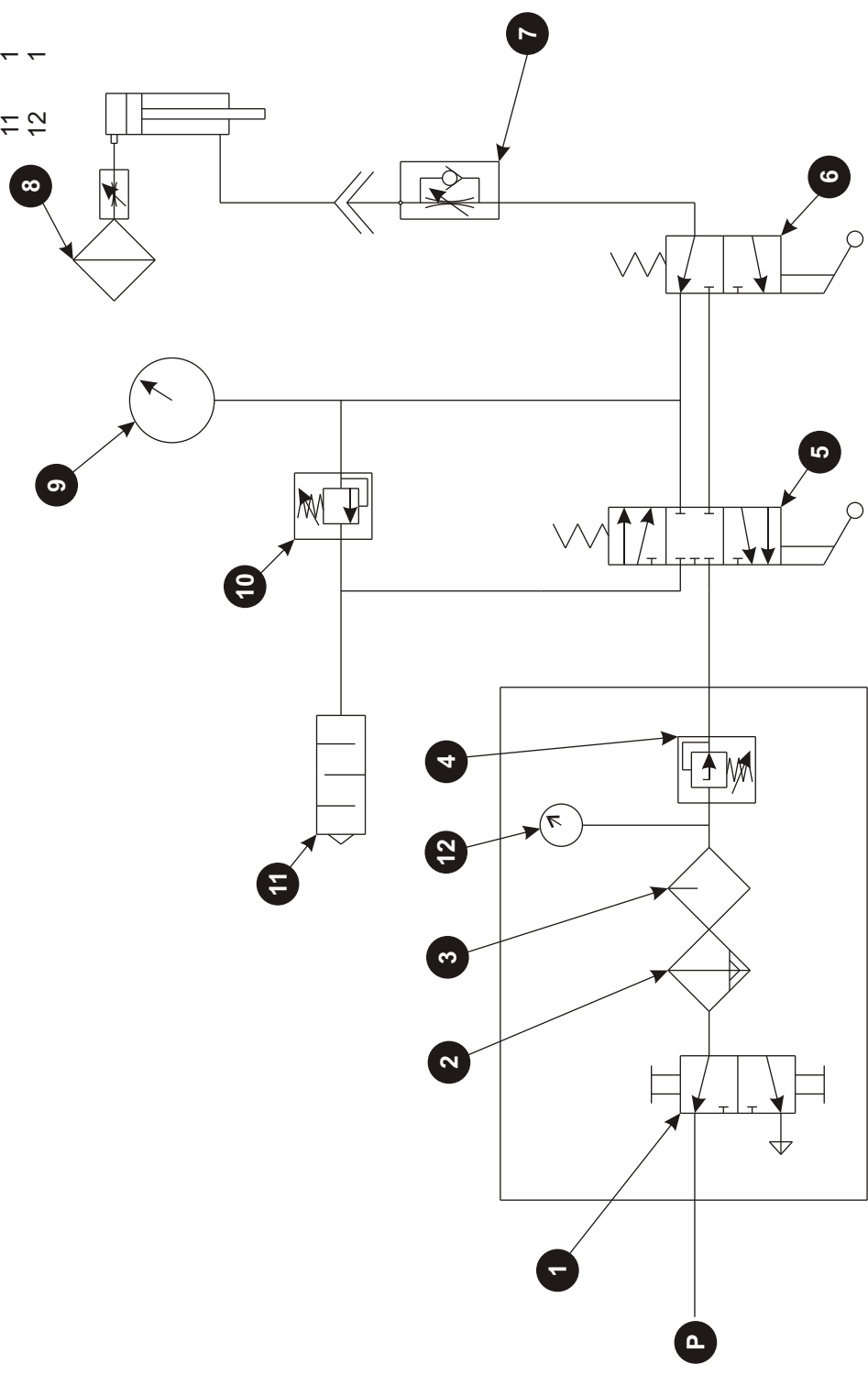


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General Notes

This unit compensates the weight only on the downwards stroke and allows for fast movement up and down for positioning. The upper end of the cylinder is equipped with a filter-silencer unit to protect the cylinder and a simple flow control to prevent from abrupt fall in case of line rupture.

Item	Qty.	Description
1	1	Shut off c/w Relief
2	1	Filter c/w automatic Drain
3	1	Lubricator
4	1	Pressure Regulator
5	1	5Way-3Pos-Dir Valve
6	1	3Way-2Pos-Dir Valve
7	1	Flow (Speed) Control c/w Check Valve
8	1	Filter-Silencer
9	1	Gauge calibrated in lbs. (4000 lbs.)
10	1	Relief Valve (Weight Control)
11	1	Silencer c/w Flow Control
12	1	Gauge (System Pressure)



FARR CANADA	
Pneumatic Pipe Weight Compensator	
Page No:	A
Scale:	NTS
Part No:	1497-000-02
Do Not Scale Drawing	