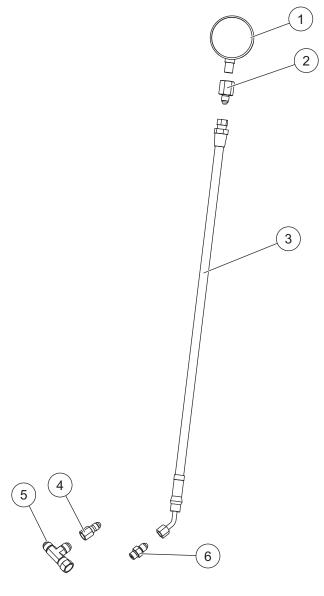


TrynEx International, LLC, 531 Ajax Drive, Madison Heights, MI 48071-2429 • www.snowexproducts.com

May 15, 2021 Lit. No. 84962, Rev. 01

Pressure Test Kit

PARTS LIST



	85268 Pressure Test Kit								
Item	Part	Qty	Description	Item	Part	Qty	Description		
1	56681	1	Gauge, 3000 psi, Liquid Filled	5	56682	1	Tee, Swivel Run -6 M JIC /		
2	84964	1	Connector –4 M JIC / 1/4 F NPTF				-6 F JIC Swivel / −6 M JIC		
3	B60426	1	Hose, 1/4 x 25 –4 F JIC / 45° –4 F JIC	6	B60004	1	Connector, Short, -4 M JIC /		
4	84965	1	Reducer, -6 F JIC / -4 M JIC				–4 M ORB		
F = Female				M = Male					

85268 PRESSURE TEST KIT

SAFETY INFORMATION

Read these instructions and labels on the snowplow before beginning installation.

A WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

A CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

INSTALLATION INSTRUCTIONS

A WARNING

The tester shall keep bystanders 8' clear of the blade during these tests. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

A CAUTION

Read this document before installing the pressure test kit.

A CAUTION

Use standard methods and practices when attaching snowplow and installing accessories, including proper personal protective safety equipment.

BEFORE PERFORMING ANY TESTS, VERIFY THE FOLLOWING:

- Snowplow is attached to vehicle and all harnesses are connected.
- Electrical connector pins and terminals are free of corrosion and tight.
- Vehicle battery connections are clean and tight and charging system is in good condition.
- · Hydraulic reservoir is filled to recommended fluid level.
- Inspect all hydraulic fittings and hoses for leaks.

HYDRAULIC SAFETY

A WARNING

Hydraulic fluid under pressure can cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.

A CAUTION

Do not mix different types of hydraulic fluid. Some fluids are not compatible and may cause performance problems and product damage.

- Always inspect hydraulic components and hoses before using. Replace any damaged or worn parts immediately.
- If you suspect a hose leak, DO NOT use your hand to locate it. Use a piece of cardboard or wood.

Hydraulic Fitting Connections

Do not use thread sealant/tape on hoses or fittings other than the NPT threads on the pressure gauge. These materials could damage the product.

Gauge assembly:

Assemble the connector to the gauge. Use thread sealant only on the NPT threads of the gauge.

For O-ring fittings:

Using two wrenches, hold the fitting body in position and tighten the jam nut until the washer again contacts the port face. Then tighten an additional 1/8 to 1/4 turn to lock the fitting in place.

For hydraulic fittings with flare ends:

Using two wrenches, hold the hose in position and tighten the flare nut 1/8 to 1/4 turn beyond hand tight.

For test port plugs:

Tighten to 10-13 ft/lb.

SnowEx® UTV V-PLOW

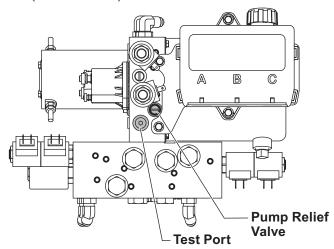
A WARNING

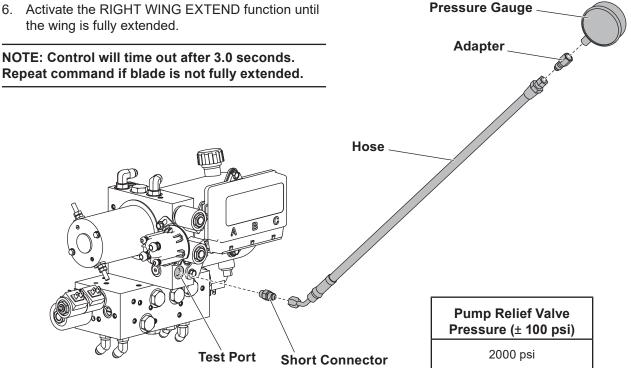
The tester shall keep bystanders 8' clear of the blade during these tests. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

NOTE: Reservoir will contain residual pressure. Slowly remove, then reinstall, breather to release pressure before proceeding.

- 1. Lower the blade to the ground. Verify proper fluid level according to the Owner's Manual before beginning the test.
- 2. Loosen plugs, hoses, or fittings slowly to relieve any residual pressure. Wrap the fitting or hose connection with a disposable cloth to absorb residual fluid. When service is complete, dispose of the cloth properly.
- 3. Carefully unscrew the plug in the test port.
- 4. Attach the 3000 psi hydraulic pressure gauge to the test port using the components shown below.
- 5. Secure the gauge so that it is visible from the cab.
- the wing is fully extended.
- 6. Activate the RIGHT WING EXTEND function until

- Repeat the RIGHT WING EXTEND function, and read the pressure shown on the gauge. The pressure should be 2000 psi (refer to table below). Adjust the pump pressure if necessary. To adjust the pressure, turn the pump relief valve clockwise to increase the pressure, or counterclockwise to decrease pressure. Do not adjust the pressure setting more than 1/4 turn at a time. **Do not adjust** the relief valve while the motor is running.
- Refer to page 9 for troubleshooting, or to the SnowEx UTV V-Plow Mechanic's Guide (Lit. No. 72104) for additional information.





LT, RD, and HD SNOWPLOWS

A WARNING

The tester shall keep bystanders 8' clear of the blade during these tests. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

NOTE: Reservoir will contain residual pressure. Slowly remove, then reinstall the breather to release pressure before proceeding.

- Lower the blade to the ground. Verify proper fluid level according to Owner's Manual before beginning the test.
- Loosen hoses or fittings slowly to relieve any residual pressure. Wrap the fitting or hose connection with a disposable cloth to absorb residual fluid. When service is complete, dispose of cloth properly.
- 3. Carefully remove the test port plug from the bottom of the hydraulic unit.
- 4. Attach the 3000 psi hydraulic pressure gauge to the test port using the components shown below.
- RD Hydraulic Unit Shown

 Short
 Connector

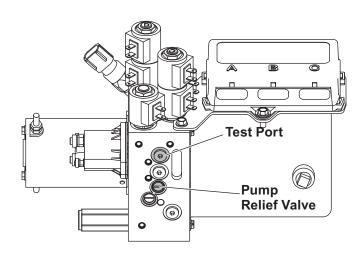
 Hose

 Pressure
 Gauge w/
 Connector

- 5. Secure the gauge so it is visible from the cab.
- 6. Activate the LEFT ANGLE function until the blade is fully angled.

NOTE: Control will time out after 3.5 seconds. Repeat command if blade is not fully angled.

- 7. Repeat the LEFT ANGLE function, and read the pressure shown on the gauge. The pressure should be 1800 or 2000 psi (refer to table below). Adjust the pump pressure if necessary. To adjust the pressure, turn the pump relief valve clockwise to increase the pressure, or counterclockwise to decrease pressure. Do not adjust the pressure setting more than 1/4 turn at a time. Do not adjust the relief valve while the motor is running.
- 8. Refer to page 9 for troubleshooting.



Pump Relief Valve Pressure (± 100 psi)					
HD	2000 psi				
RD, LT	1800 psi				

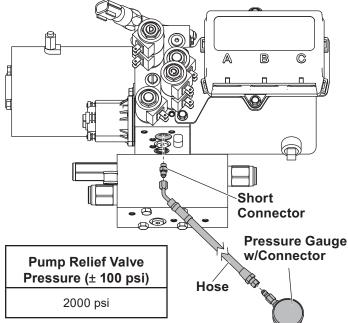
SPEEDWING™ & POWER PLOW™ SNOWPLOWS

A WARNING

The tester shall keep bystanders 8' clear of the blade during these tests. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

NOTE: Reservoir will contain residual pressure. Slowly remove, then reinstall, breather to release pressure before proceeding.

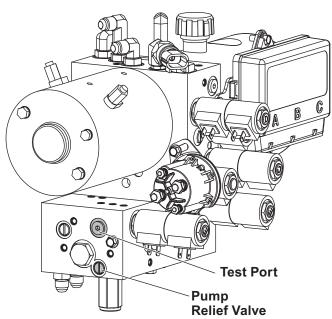
- Lower the blade to the ground. Verify proper fluid level according to Owner's Manual before beginning the test.
- Loosen hoses or fittings slowly to relieve any residual pressure. Wrap the fitting or hose connection with a disposable cloth to absorb residual fluid. When service is complete, dispose of the cloth properly.
- 3. Carefully remove the plug from the test port on the bottom of the hydraulic unit.
- 4. Attach the 3000 psi hydraulic pressure gauge to the test port using the components shown below.
- 5. Secure the gauge so that it is visible from the cab.
- Activate the LEFT ANGLE function until blade is fully angled.
 SPEEDWING Shown



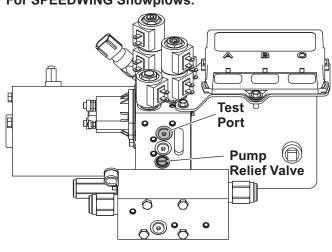
NOTE: Control will time out after 3.5 seconds. Repeat command if blade is not fully angled.

- 7. Repeat the LEFT ANGLE function, and read the pressure shown on the gauge. The pressure should be 2000 psi (refer to table below). Adjust the pump pressure if necessary. To adjust the pressure, turn the pump relief valve clockwise to increase the pressure, or counterclockwise to decrease pressure. Do not adjust the pressure setting more than 1/4 turn at a time. Do not adjust the relief valve while the motor is running.
- 8. Refer to page 9 for troubleshooting.

For POWER PLOW Snowplows:



For SPEEDWING Snowplows:



SnowEx® UTV STRAIGHT BLADES

A WARNING

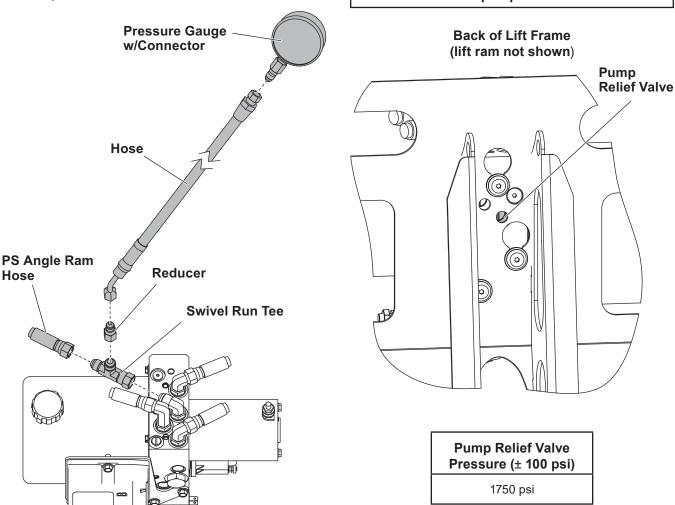
The tester shall keep bystanders 8' clear of the blade during these tests. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

- Lower the blade to the ground. Verify proper fluid level according to Owner's Manual before beginning the test.
- Loosen plugs, hoses, or fittings slowly to relieve any residual pressure. Wrap the fitting or hose connection with a disposable cloth to absorb residual fluid. When service is complete, dispose of the cloth properly.
- 3. Attach the 3000 psi pressure gauge in line with the passenger's side angle ram hose using the components shown below.

- 4. Secure the gauge so it is visible from the cab.
- 5. Activate the ANGLE LEFT function until blade is fully angled. Repeat the ANGLE LEFT function, and read the pressure shown on the gauge.
- 6. The pressure should be 1750 psi (refer to table below). Adjust the pump pressure if necessary. To adjust the pressure, turn the pump relief valve clockwise to increase the pressure, or counterclockwise to decrease pressure. Do not adjust the pressure setting more than 1/4 turn at a time. Do not adjust the relief valve while the motor is running.
- 7. Refer to page 9 for troubleshooting.

A CAUTION

Support the lift frame before unpinning the lift ram to access the pump relief valve.



HDV™ SNOWPLOWS

A WARNING

The tester shall keep bystanders 8' clear of the blade during these tests. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

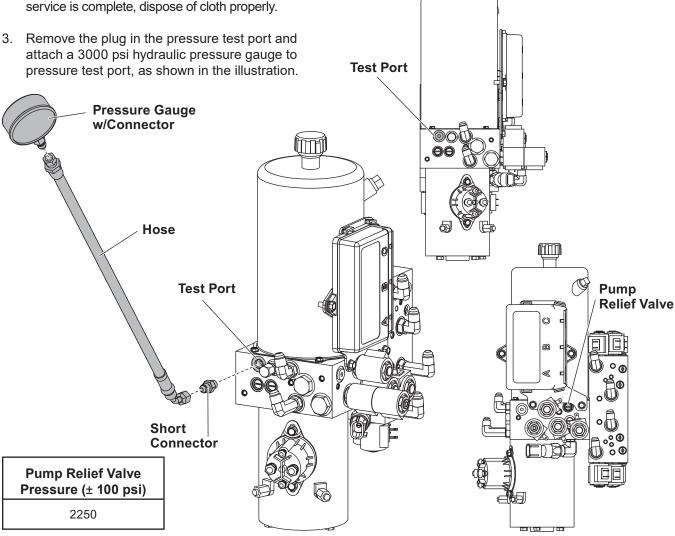
NOTE: The reservoir will contain residual pressure. Remove, then reinstall, the breather to release pressure before proceeding.

- 1. Lower blade to the ground. Verify proper fluid level according to Owner's Manual before beginning test.
- 2. Loosen plugs, hoses, or fittings slowly to relieve any residual pressure. Wrap the fitting or hose connection with a disposable cloth to absorb residual fluid. When service is complete, dispose of cloth properly.

Activate the RIGHT RETRACT function until the blade is fully retracted.

NOTE: The control will time out after 3 seconds. Repeat the command if the blade is not yet fully retracted.

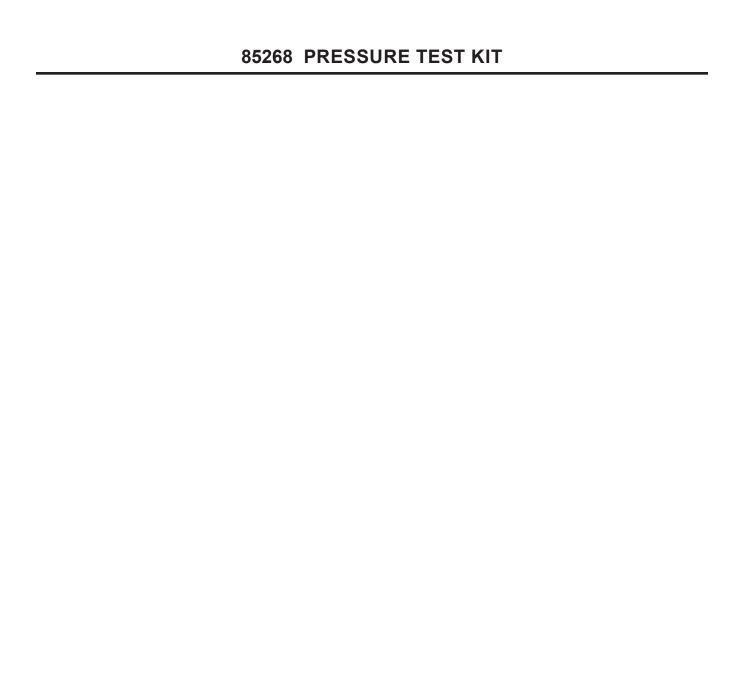
- Repeat the RIGHT RETRACT function, and read the pressure shown on the gauge. The pressure should be 2250 psi (refer to table below). Adjust the pump pressure if necessary. To adjust the pressure, turn the pump relief valve clockwise to increase the pressure, or counterclockwise to decrease pressure. Do not adjust the pressure setting more than 1/4 turn at a time. Do not adjust the relief valve while the motor is running.
- Refer to page 9 for troubleshooting.



85268 PRESSURE TEST KIT

PUMP RELIEF VALVE TROUBLESHOOTING

Condition	Possible Cause	Corrective Action		
		Pump relief valve may be out of adjustment. Turn the relief valve clockwise 1/4 turn and retest pressure. Repeat until the correct pressure (set point pressure) is obtained.		
Pump pressure is not at set point ± 100 psi	Pump Relief Valve	If the correct pressure is not obtained after readjustment, remove and inspect the relief valve and its components. Check the O-ring, stem, and ball for wear or damage. Reseat the ball or replace the relief valve as needed. Reinstall/replace and readjust the valve, then retest the pump pressure.		
	O-Ring (between pump and valve block)	Remove the pump and inspect the O-ring between the pump and the valve block for damage. Reinstall/replace the O-ring and pump, then retest the pump pressure.		
	Pump	Remove the pump and inspect it for wear or broken gears. Replace the pump if needed. Adjust the pump relief valve, then retest the pump pressure.		



Copyright © 2021 Douglas Dynamics, LLC. All rights reserved. This material may not be reproduced or copied, in whole or in part, in any printed, mechanical, electronic, film, or other distribution and storage media, without the written consent of TrynEx International, LLC. Authorization to photocopy items for internal or personal use by TrynEx International outlets or snowplow owner is granted.

TrynEx International reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. TrynEx International or the vehicle manufacturer may require or recommend optional equipment for snow removal. Do not exceed vehicle ratings with a snowplow. TrynEx International offers a limited warranty for all snowplows and accessories. See separately printed page for this important information. The following are registered (®) or unregistered (™) trademarks of Douglas Dynamics, LLC: HDV™, POWER PLOW™, SnowEx®, SPEEDWING™.

Printed in U.S.A.