This guide is designed to provide the Sherco owner with instructions on how to “bleed” or purge the air out of the brake and clutch hydraulic systems on all Sherco models, as well as other brands of trials motorcycles.

The particular bike shown in this manual utilizes the twin piston AJP brake cylinders, older models utilize the single piston brake cylinders. The fittings on the cylinders are not the exact same size, but the principles shown are the same.

If you have any questions about the procedure, please call Ryan Young Products at 1-800-607-8742.
Brake/Clutch Bleeding Comments

Trapped air in hydraulic brake or clutch systems can result in significant and perhaps dangerous performance loss. For example, the air in the system may cause the brakes to lack their normal stopping power. Similarly, trapped air may prevent the clutch from fully disengaging.

This guide will demonstrate three progressively involved techniques to bleed or purge trapped air:

• Gravity Method
• Pressure Method
• Syringe Method

Use any of the above three methods until all the trapped air is bled.

Note that patience is key in bleeding hydraulic systems. This process will take some time and should not be rushed.
If you are uncertain as to your ability to perform the process properly it is recommended that you have this service performed by a qualified Sherco dealer.

Note: Brake Fluid is harmful to your body and to some parts of your bike and should be handled carefully. Spilled brake fluid will eat through clear coat finishes and permanently discolor plastic (i.e., tank and fenders).

However, brake fluid floor spills can be cleaned up using ordinary tap water.

It is recommended that safety goggles be worn while performing these operations.
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Rear Brake System Bleeding – Preparation

1. Remove the rear fender, fuel tank and the air box. The rear brake reservoir is located as shown.

2. The reservoir must be full of brake fluid before starting the bleeding process. The reservoir must be removed in order to fill it. Using a 4mm Allen wrench remove the bolt that holds the reservoir to the frame.
Check the Brake Pedal for Play

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Make sure that there is at least 1/8” (6mm) of free play between the brake pedal and the stop on the frame.

Remove the Cap and Fill the Reservoir

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Remove the cap and then fill the reservoir with a high quality DOT 4 brake fluid. We recommend MAXIMA Dot 4 Brake Fluid which is available from Ryan Young Products. The reservoir was emptied for this photo.

Temporarily reinstall the reservoir with the cap removed for the next steps in this procedure.
Rear Brake System Bleeding – Gravity Method

Locating the Rear Brake Bleeder Valve

- Place an 8mm box end wrench on the bleeder valve and then place a piece of 3/16” ID (5mm) clear tubing over the end of the bleeder valve.

- Make sure the brake reservoir is full of brake fluid.

- Make sure the cap is removed from the brake reservoir.

- While slowly opening the brake bleeder valve using the 8mm wrench, brake fluid should move into the clear tubing. Watch for any air bubbles, which indicate that trapped air is being released.

- Close the bleeder valve, and add additional fluid to the brake reservoir as required to keep it full.

- Repeat the above steps until there are no bubbles present in the fluid when the brake bleeder valve is opened.

- To keep from spilling brake fluid when removing the tubing from the bleeder valve, place your thumb over the end of the tube as it is being removed, causing a vacuum on the residual fluid.

- If this resolves the problem, then reassemble the bike.

Locate the rear brake bleeder valve and remove the black rubber cap. (The cap is shown removed in this photo).
Rear Brake System Bleeding- Pressure Method at Bleeder Valve

The Pressure Method involves bleeding the air from three different locations within the system. The first area to bleed is the rear brake caliper bleeder valve, followed by the rear brake caliper hydraulic hose fitting, and thirdly, the master cylinder hose fitting. Note that the brake reservoir should be full and its cap should be removed.

With a piece of 3/16” ID (5mm) clear tubing placed over the end of the bleeder valve:

1. Pump the rear brake pedal a few times, and then hold it down with slight pressure.
2. Slowly open the bleeder valve while applying pressure to the pedal.
3. Close the bleeder valve prior to the brake pedal bottoming in its travel.
4. Watch for air bubbles in the ejecting fluid through the clear plastic tube.
5. Repeat the process at each fitting until no more air bubbles are present.

This photo shows the constant application of pressure to the rear brake pedal while simultaneously opening the brake bleeder valve. Use an 8mm box end wrench to loosen the bleeder valve with an attached piece of clear tubing to in order to catch any ejected fluid.

Repeat this process until all of the air is removed from this portion of the system.
Rear Brake System Bleeding - Pressure Method at Caliper Hose Fitting

This photo shows the application of constant pressure to the rear brake pedal while simultaneously loosening the rear brake caliper hydraulic hose fitting bolt. Use a 5mm Allen wrench to alternately loosen and tighten this bolt to allow fluid and air to escape. Pump the brake pedal a few times prior to each loosening of this bolt. Tighten the bolt prior to the rear brake lever bottoming in its downward stroke.

Repeat this process until no further air bubbles are visible from this portion of the rear brake system.
Rear Brake System Bleeding - Pressure Method at Master Cylinder Hose Fitting

1. Use a 14mm box end wrench to open the fitting on the rear brake master cylinder while simultaneously applying constant pressure to the brake pedal. Close the fitting before the rear brake pedal bottoms out. Then pump the pedal a few times, hold it at constant pressure, and slightly re-open the fitting.

2. Repeat this process until all of the trapped air is removed from this portion of the system.

3. If this resolves the problem, then reassemble the bike.
Rear Brake System Bleeding - Syringe Method

When the Gravity or Pressure Methods of bleeding are not successful, use the Syringe Method. Use this method any time after rebuilding the brake caliper, or replacing the rear hose assembly.

Purchase a large clear syringe from a veterinarian, horse supply, or hardware store. A piece of 3/16” (5mm) ID clear tubing is also required. The tubing must tightly seal on the syringe and the bleeder valve.

Fill the syringe and the tube completely with brake fluid. With all of the air removed from the syringe and tubing, attach the tubing to the brake bleeder valve. Open this valve using an 8mm wrench and slowly “back-fill” the system. When the brake reservoir is full and no further air bubbles are present, close the brake bleeder valve and remove the tubing from it.

Position the reservoir to a location where it can be easily observed, and attach it to the frame using a zip tie. Watch for air bubbles, and ensure that the reservoir does not overflow.

Use an 8mm box end wrench to open and close the bleeder valve. Squeeze out the brake fluid while the valve remains open.

After the system is filled using the syringe, it may also require further bleeding using the Pressure Method.

But if the Syringe Method fills the system without introducing air into the system, then reassemble the bike.
Bleeding the Front Brake system will use the same basic techniques as bleeding the rear brake. The front brake is actually easier to bleed than the rear brake, because it does not have a remote reservoir.

12 Make sure that there is at least 1/8" (6mm) of free play in the brake lever.

13 Loosen the two lever assembly pinch bolts and rotate the reservoir to a position level to the ground. Remove the brake reservoir cover and gasket. Top off with brake fluid if it is low.
Locate the front brake bleeder valve and remove the black rubber cap as shown.

Place a 10mm box end wrench and a piece of 3/16” (5mm) ID clear tubing on the brake bleeder valve. Use one hand to open and close the bleeder valve while using the other hand to hold the front brake hose down, to eliminate the possibility of air becoming trapped in the otherwise elevated hose.

While slowly opening the brake bleeder valve with a 10mm wrench, brake fluid should move into the clear tubing. Watch for any bubbles, which indicate that trapped air is being released.

Close the bleeder valve, and add additional fluid to the brake reservoir as required to keep it full.

Repeat the above steps until there are no bubbles present in the tubing as the bleeder valve is opened.

If this resolves the problem, then reassemble the bike.
The Pressure Method involves bleeding air from two areas of the system: the brake bleeder valve and the brake caliper hose fitting.

Note that the brake reservoir should be full, and its cover and the gasket should be removed.

1. Pump the brake lever very gently and then hold it in with constant pressure.

2. Slowly open the brake caliper hose fitting while applying constant pressure to the lever.

3. Close the fitting prior to the brake lever bottoming in its travel.

4. Watch for air bubbles at the fitting being bled.

5. Repeat the process until all of the air is removed from this part of the front brake system.

This photo shows constant application of pressure to the system via the front brake lever while simultaneously slowly opening the brake bleeder valve using a 10mm wrench. Close the bleeder valve prior to the front brake lever bottoming out in its travel.

Repeat this process until no bubbles are present in the tubing when opening the bleeder valve.
Front Brake System Bleeding- Pressure Method at the Caliper Hose Fitting

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➡️ Next bleed the air at the caliper hose fitting located on the front brake caliper assembly.

➡️ First, wrap a paper towel around the fitting to catch any spilled brake fluid to keep it off the disc, which will ruin the brake pads.

➡️ Use a 14mm box end wrench to loosen or tighten the fitting. Repeat the same 5 steps as in bleeding the bleeder valve on the previous page (apply pressure to the brake lever and slowly open and close the fitting).

➡️ If this resolves the problem, then reassemble the bike.
Front Brake System Bleeding - Syringe Method

When the Gravity or Pressure Methods of bleeding are not successful, use the Syringe Method. Use this method any time after rebuilding the brake caliper, or replacing the brake hose assembly. Purchase a large clear syringe from a veterinarian, horse supply, or hardware store. A piece of 3/16” (5mm) ID clear tubing is also required. The tubing must tightly seal on the syringe and the bleeder valve.

1. Remove the brake reservoir cover and gasket. Top off with brake fluid if it is low.
2. Fill the syringe and the tube completely with brake fluid.
3. With all of the air removed from the syringe and tubing, attach the tubing to the brake bleeder valve.
4. Use an 10mm box end wrench to open and close the bleeder valve. Squeeze out the brake fluid while the valve remains open to “back-fill” the system.
5. When the brake reservoir is full and no further air bubbles are present, close the brake bleeder valve and remove the tubing from it.
6. After the system is filled using the syringe, it may also require further bleeding using the Pressure Method. But if the Syringe Method fills the system without introducing air into the system, then reassemble the bike.
Clutch System Bleeding – Gravity Method

Bleeding the Clutch system utilizes exactly the same techniques used for front brake bleeding.

20. Make sure that there is at least 1/8” (6mm) of free play at the clutch lever.

21. Loosen the two lever assembly pinch bolts and rotate the reservoir to a position level to the ground. Remove the clutch reservoir cover and gasket. Top off with brake fluid if it is low.
Clutch System Bleeding – Gravity Method

Place a 7mm box end wrench on the clutch bleeder valve and then place a piece of 3/16 (5mm) ID clear tubing over the end of the bleeder.

Ensure that the brake reservoir cap and gasket are removed, and that the reservoir is full of brake fluid.

While slowly open the bleeder valve with a 7mm wrench, brake fluid should move into the clear tubing. Watch for any air bubbles which indicate that trapped air is being released.

Close the bleeder valve, and add additional fluid to the clutch reservoir as required to keep it full.

Repeat the above steps until there are no bubbles present in the tubing when the bleeder valve is opened.

If this resolves the problem, then reassemble the bike.
Clutch System Bleeding - Pressure Method

The Pressure Method involves bleeding air from two areas of the system: the clutch slave cylinder bleeder valve and the clutch slave cylinder hose fitting.

Note that the clutch reservoir should be full, and its cover and the gasket should be removed.

1. Pump the clutch lever very gently and then hold it in with constant pressure.

2. Slowly open the clutch slave cylinder bleeder valve using a 7mm wrench while applying constant pressure to the lever.

3. Close the fitting prior to the clutch lever bottoming in its travel.

4. Watch for air bubbles at the fitting being bled.

5. Repeat the process until all of the air is removed from this part of the clutch system.

Next, bleed the clutch hose fitting located directly below the bleeder valve.

Use a 14mm box end wrench and repeat the above steps to remove any air from this portion of the system. A paper towel wrapped around the fitting can be used to catch any brake fluid.

Repeat the above steps to remove any air from this portion of the system. If this resolves the problem, then reassemble the bike.
As was the case with the front and rear brakes, there will be occasions when it will not be possible to remove all of the air from the clutch system using the Gravity or Pressure Methods. In these cases, it will be necessary to pressure fill the system with a syringe.

Purchase a large clear syringe from a veterinarian, horse supply, or hardware store. A piece of 3/16” (5mm) ID clear tubing is also required. The tubing must tightly seal on the syringe and the bleeder valve.

This photo shows filling the system using the Syringe Method. The clutch reservoir cap and gasket should be removed for this procedure.

Use a 7mm box end wrench to open and close the bleeder valve (as shown on Page 18). Squeeze out the brake fluid while the valve remains open to “back-fill” the system.

Watch for air bubbles in the clutch reservoir. When the reservoir is full and air bubbles are no longer present, close the bleeder valve and remove the syringe.

After the system is filled using the syringe, it may also require further bleeding using the Pressure Method. But if the Syringe Method fills the system without introducing air into the system, then reassemble the bike.