Sherco Setup and Lubrication Guide

This guide is designed to provide the Sherco owner with instructions on how to:

• Set up a new bike
• Clean and re-oil the air filter
• Change the transmission oil
• Change the fork oil
• Repack the suspension dog bone bearings
• Repack the headset bearings
• Repack the wheel bearings
• Tighten the spokes and true the wheels

Note: The bikes shown in the following photos are in-service 2002 2.9 models. They may not be exactly like the bike you are working on but the principles shown are applicable.

If you have any questions about the procedures, please call Ryan Young Products at 1-800-607-8742.
New Bike Set up

Here are some suggestions that we believe will help ensure a long service life for your new Sherco.

•Take the time to check the tightness of these fasteners.

<table>
<thead>
<tr>
<th>Fastener</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front axle</td>
<td>37 ft lbs.</td>
</tr>
<tr>
<td>Front axle pinch bolts</td>
<td>8 ft lbs.</td>
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<tr>
<td>Triple clamp pinch bolts</td>
<td>8 ft lbs.</td>
</tr>
<tr>
<td>Front brake caliper bolts</td>
<td>15 ft lbs.</td>
</tr>
<tr>
<td>Fork brace mounting bolts</td>
<td>6 ft lbs.</td>
</tr>
<tr>
<td>Handlebar mounting bolts</td>
<td>15 ft lbs.</td>
</tr>
<tr>
<td>Suspension linkage bolts</td>
<td>30 ft lbs.</td>
</tr>
<tr>
<td>Swing arm bolt</td>
<td>37 ft lbs.</td>
</tr>
<tr>
<td>Rear axle bolt</td>
<td>44 ft lbs.</td>
</tr>
<tr>
<td>Steering tube nut</td>
<td>37 ft lbs.</td>
</tr>
<tr>
<td>Front and rear brake rotor bolts</td>
<td>8 ft lbs.</td>
</tr>
</tbody>
</table>

•Tighten the spokes initially, then tighten them after the first ride and check them for proper tightness after every ride. (see pages 34 – 36 for details on how to properly tighten the spokes)

•Tighten the rear sprocket fasteners initially and after the first ride then continue to check these bolts for tightness on a regular basis. (20 ft lbs)

•Use at least 93 octane fuel mixed at 80:1 ratio. This means, for example, 8 ounces of high quality 2 stroke oil should be mixed with 5 gallons of gasoline (1.6 ounces (46 cc) per gallon). We recommend Maxima Formula K2 Racing 2-cycle oil (available from RYP)

•During the first 10 hours of operation, do not run the engine at a constant speed for an extended period of time. Instead, vary the speed. Section riding is a very good way to break-in the engine.

•Check the Spark Plug Gap initially and then check it every 3 months. The gap should be .020 (.5mm) The recommended Spark Plug is the NGK BP5ES.
## Recommended Lubrication Intervals

<table>
<thead>
<tr>
<th>Type of Lubrication</th>
<th>Interval</th>
<th>Recommended Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean / inspect and re-oil the air filter</td>
<td>Every dusty ride / every time the bike is pressure washed</td>
<td>Maxima FAB air filter cleaner. Maxima FFT air filter oil</td>
</tr>
<tr>
<td>Change the transmission oil</td>
<td>Every 20 hours of operation</td>
<td>Maxima MTL 2-cycle transmission lube (450 cc)</td>
</tr>
<tr>
<td>Change the fork oil</td>
<td>2 times per year</td>
<td>Maxima 5w or 10w fork fluid (270cc oil change, 330cc complete rebuild)</td>
</tr>
<tr>
<td>Clean / inspect and repack the suspension dog bone bearings</td>
<td>2 times per year unless you have been riding in very wet / muddy conditions</td>
<td>Maxima water proof grease mixed 50/50 with a good quality anti seize lubricant</td>
</tr>
<tr>
<td>Clean / inspect and repack the headset bearings</td>
<td>2 times per year</td>
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</tr>
<tr>
<td>Clean / inspect and repack the wheel bearings</td>
<td>2 times per year unless you have been riding in very wet / muddy conditions</td>
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</tr>
<tr>
<td>Lubricate all moving joints. (front brake lever, clutch lever, throttle tube, foot pegs, rear brake pivots, kick stand pivot, chain tensioner pivot etc.)</td>
<td>After each time the bike is washed</td>
<td>Maxima multi-purpose lube</td>
</tr>
</tbody>
</table>

Maxima products are available from Ryan Young Products

1-800-607-8742
Air Filter Cleaning and Re-oiling

Air filter maintenance is critical, the filter must be kept clean if you expect to receive long life from your engine.

The first step is to remove the rear fender. Using a 4mm Allen wrench remove the 3 fasteners and set the fender aside.

This fastener (fender / fuel tank mounting)

2 fasteners, 1 on the R.H. side and 1 on the L.H. side.

Remove the filter retainer and the filter. Newer models have a clip retained by a bolt that also must be removed. Use a 3mm Allen wrench to remove this bolt.

Place the filter and retainer in a suitable container.

Clean the filter and retainer using a good quality air filter cleaner, we recommend Maxima FAB air filter cleaner.

Once the filter is cleaned set it aside so that it can dry.
While you are waiting for the filter to dry, it is good maintenance practice to also remove the airbox and clean it with warm soapy water and then blow it dry with compressed air.

To remove the air box use a 4mm Allen wrench and remove the 3 fasteners shown here.

Next loosen the rear clamp by loosening the Phillips screw, which leaves the rubber hose connected to the carburetor.

Remove the fender mounting nut from the subframe in order to make removing the air box easier.

Reinstall the airbox in reverse order.
Airbox Modification

If your bike is equipped with the round rubber seal that attaches to the filter box, you may want to perform this modification to help retain an airtight seal between the airbox and the silencer. This is important for keeping the air filter clean.

Carefully drill a series of 1/8” holes along the edge of the air box as shown. Be very careful that you do not drill into the air box.

Drill 5-7 evenly spaced holes.

Install zip ties as shown, using them to retain the rubber seal against the airbox.
The finished product is shown above with the zip ties tightened and their unused ends cut off.

For extra protection, it is optional to apply a bead of black silicone sealant to the joint between the rubber seal and the airbox.
Reinstall the air box, tighten all of the fasteners including the hose clamp on the carburetor manifold.

Apply the filter oil to the dry filter element. We recommend Maxima FFT filter oil. Follow the manufacturers instructions on how to apply the oil. Coat the entire filter inside and outside surfaces with oil and squeeze out the waste.

Note that the tapered end of the filter retainer should be installed towards the front of the bike.
Install the clean and oiled filter back in the air box. Note that the element edges are evenly and flatly displaced by the air filter retainer. Do not allow the filter edges to be bunched up, allowing dirty air to bypass the filter and enter the motor.

Reinstall the rear fender and it’s three bolts. This job is finished.
Changing the Transmission Oil

Locate the bolt that must be removed in order to drain the transmission oil, it is located as shown.

Use a 5mm Allen wrench and remove the bolt. Lean the bike to the left and let the oil completely drain out of the transmission.

While you have the drain bolt removed examine the sealing washer and make sure that it is still serviceable.

New washers are available from RYP.
Reinstall and tighten the drain bolt.

Locate the transmission oil filler plug. Use a 5mm Allen wrench and remove this plug.

The filler plug seal should also be examined and replaced if it is not serviceable.

New seals are available from RYP.
Measure 450cc of Transmission oil in a suitable container.

We recommend Maxima MTL transmission oil.

Maxima products are available from RYP.

Use an appropriate funnel and carefully pour the oil into the transmission.

Leaning the bike to the left facilitates this job. Do not lay the bike on its side to perform this operation.

Reinstall the filler plug and the job is finished.
Changing the Fork Oil

Support the bike so that the front wheel is off of the ground.

With a 10mm socket or box end wrench loosen the axle pinch bolts. They do not have to be removed.

Use a 10mm Allen wrench and remove the front axle. Remove the front wheel.

Note: You do not have to remove the front wheel to change the fork oil however with the front wheel removed you can be assured that you do not get any new or used oil on the brake rotor.
This is how the bottom of the fork looks with the front wheel removed.

Caution: Do not activate the front brake lever with the wheel removed as this could cause air to be introduced into the system.

Remove the LH and RH fork blue plastic fork caps.

Use a 3mm Allen wrench and remove the rotor guard fixing bolt. (The guard had been removed earlier)
Use an 8mm Allen wrench and remove the RH and LH fork drain bolts, these bolts also retain the internal damping rods and can be difficult to remove.

You may have to use an impact tool to remove the two bolts, a small air impact tool was used in this illustration.

Once the bolts are removed examine the sealing washers and make sure they are serviceable.

New washers are available from RYP.

Once the oil is drained reinstall the bolts, torque them to 18 ft lbs.
Carefully measure 270 cc of fork oil for each leg for a normal oil change. If you have taken the fork apart and cleaned all of the components then use 330 cc per leg.

We recommend Maxima Fork Fluid either 5W or 10W.

Use an appropriate size funnel and pour the oil into each leg. Once the oil is in the fork legs the blue plastic fork caps can be reinstalled.
Reinstall the front wheel. Installation is the reverse of the removal.

Tighten the axle bolt to 37 ft lbs. Tighten the pinch bolts to 8 ft lbs.

Note: It is recommended that you coat the axle and pinch bolts with anti seize lubricant.

Note the location of the wheel spacer.
Cleaning and Lubricating the Suspension “Dog Bone” Bearings

The first step is to support the bike on a suitable stand so that the rear wheel is off of the ground. The next step is to remove the rear fender and the airbox. (for details on how to do this, see pages 4 & 5)

In order to provide clearance for removal of the rear dog bone bolt remove the nut from the foot peg bolt and tap it up out or the way as shown. (use a 13mm wrench and a 6mm Allen wrench)
Parts Book Page Showing the Suspension Linkage
This Page Can be Downloaded from the Sherco USA Web Page
Remove the top shock mounting bolt, nut and washer. (part numbers 810, 8.48 and 8.41) 17mm wrench and 8mm Allen wrench.

Remove the dog bone bolt, nut and washers. (part numbers 16.22, 8.41 and 8.53) 17mm wrench and 8mm Allen wrench.
Remove the bottom shock bolt. (part number 16.23) 8mm Allen wrench.

With the upper and lower shock bolts removed you can now remove the shock unit from the bike.
With the shock unit removed you can access the bolts and nuts that retain the dog bones to the chassis. Remove these bolts using 2 - 13mm wrenches. (part numbers 16.25 and 8.42)
Here are the parts that need to be cleaned and lubricated, examine the needle bearings and the bushings carefully and replace if required. Clean all of the parts thoroughly and allow to dry.

Liberally apply a mixture of Maxima waterproof grease and anti seize lubricant to the bearings and the bushings.

The dog bones are identical and can be used on either side of the bike.
Reinstall the dog bones and the shock unit in reverse order.

Tighten these bolts to 18 ft lbs.

Tighten the bottom shock bolt to 37 ft lbs.

Tighten the upper shock bolt to 30 ft lbs.
If you will place the washer as shown you can install the rear dog bone bolt without having to remove the chain.

Tighten this bolt to 30 ft lbs.

This is how the finished product should look when viewed from under the bike. (RH side)
Reinstall the foot peg mounting nut, the airbox and the rear finder and you are ready to ride.

While you have the shock removed it is recommended that you rotate the shock adjustment ring so that the 3mm allen head locking screw faces the rear of the bike. This will make adjusting the suspension “sag” easier to perform.
Cleaning, Inspecting and Repacking the Headset Bearings

Set the bike on a suitable stand so that the front wheel is at least 3 inches off of the ground.

In order to reinstall the handlebars in the same location it is a good idea to use a marking pen and mark the handlebars and handlebar clamp as shown.

Use a 6mm Allen wrench and remove the 4 handlebar mounting bolts.
It is a good idea to use a zip tie to attach the handlebars to the fork so that they stay out of the way while you work on the bearings.

In order to get to the bearings you must remove the top triple clamp.

Use a 5mm Allen wrench and remove the 2 RH and 2 LH triple clamp pinch bolts.

Use a 24mm socket or box end wrench and remove the steering tube nut.

You should now be able to remove the triple clamp, it may require a few gentle taps with a plastic hammer.
Use a spanner wrench and remove the bearing retaining nut.

Carefully lower the fork assemble so that the bottom bearing is exposed.

Placing a piece of wood in front of the wheel will keep the fork from falling off of the bike.
Lift the upper bearing out of the race, clean and inspect both bearings and both races, make sure the bearings turn freely and that the races are smooth. It is not necessary to remove the lower bearing in order to clean and inspect it.

We suggest that you pack the bearings with a mixture of Maxima waterproof grease and anti seize lubricant.
Reinstall the fork in reverse order.

Reinstall the bearing retainer nut, tighten it up such that the fork turns freely from side to side. You should not be able to feel any free play in the unit. Do not over tighten.

Reinstall the triple clamp, you may have to gently tap it to get it to on the fork tubes.

Reinstall the Steering tube nut, (apply loctite to this nut) tighten it to 37 ft lbs. Check and make sure the fork still turns freely side to side. If it is tight you will have to loosen this nut and then loosen the bearing retainer nut. Take your time and make sure that this is properly adjusted.
Once you are satisfied that the you have the headset bearings adjusted and tightened properly then reinstall the pinch bolts. Tighten them to 8 ft lbs.

Reinstall the handlebars, tighten the mounting bolts to 15 ft lbs.

This job is finished and you are ready for a test ride.
Cleaning, Inspecting and Repacking the Wheel Bearings

For the purpose of this guide we are just showing packing the front wheel bearings, packing the rear wheel bearings follows the same basic procedure.

Remove the front wheel as shown on page 13.

Place the wheel as shown above, a garbage can with a towel placed over it makes a good work area.

Remove the spacer, then with a sharp tool very carefully remove the seal. With the seal removed inspect and clean the bearing with a good quality cleaning solvent. If the bearing is serviceable repack it with a mixture of Maxima waterproof grease and anti seize lubricant. Replace the seal.

Repeat on the opposite side bearing.

Replace the wheel and the job is finished.
Spoke Tightening Technique

New Wheel

- The first thing to emphasize is to “Take your Time”

- The next thing is to get a good quality spoke wrench, the front spoke nipples on the 2002, 2.9 require a 5.7mm wrench and the rear nipples require a 6.4mm wrench. The one shown below is a good quality wrench that has replaceable tips. Another excellent wrench is one made by the FASST company that is actually a spoke torque wrench. RYP will have this wrench available.

- A quick way to check the spokes for tightness is to lightly tap them with a metal object, the spokes will emit a dull sound if they are loose. This is only a quick and dirty method but it is a good indicator, after you do it for a while you will quickly be able to locate loose spokes.

- The simplest way to check the spokes for tightness is to start at the valve stem and move from spoke to spoke, only tighten each spoke ½ revolution at a time, this should keep the wheel in proper alignment.
• Continue around the wheel until you have finished one full revolution, start over and follow this process until all of the spokes are tight. Do not over tighten the spokes.

• Once you have tightened the spokes you will want to check the wheel for trueness. Shown below is a simple way to add a gage to the fork to use to determine if the wheel is true.

2 zip ties and a piece of wood can be used to make a pointer to determine if the wheel is true. (+/ - 2mm run out)

• If the wheel is out of true you will need to loosen the spokes on the side of the wheel that is opposite to the side that must be tightened in order to bring the wheel into correct alignment. Do not get in a hurry, this process can take some time.

• It is recommended that you apply a good quality oil to each spoke nipple in order to prevent corrosion between the spoke and the nipple.
Spoke Tightening Technique

In Service Wheel

Use all of the same principles that were used on the new wheel except that the *in service* wheel will require some additional steps.

1. Lubricate the joint between the spoke and nipple with a good quality penetrating oil.

2. Start at the valve stem and *LOOSEN* the nipple ½ turn before you tighten it; this should loosen any corrosion that may have developed. As in the case of the new wheel only tighten each spoke ½ turn.

3. Follow this same procedure around the wheel until you are satisfied that the spokes are tightened properly; you may have to go around the wheel several times.

4. When you are finished tightening the spokes you should check the wheel for trueness as you did with the new wheel, follow the same procedure as you did with the new wheel to true it.

As stated before, if you have any questions about this or any procedure contact Ryan Young Products at 1-800-607-8742.