If you were lucky when you first received your trombone, someone took a few minutes to teach you how to put your new best friend together and lubricate its handslide and tuning slide. If not, here are the basics of how to keep your trombone playing smoothly.

**Slide lubrication**

Let's start by assuming that your slide is already clean or has been working smoothly, but that you'd like to relubricate it. If you have a slide that sticks but has no obvious dents in it, you can skip down to Bath Time below. If your slide does have a dent in it, or several dents, then no amount of cleaning is going to help. You need to locate a slide repairman in your area to have those dents removed.

There are basically three types of products used to lubricate a slide: (1) oil, (2) a cream of some type, and (3) specialty products that combines two lubricants. Each is used separately and most people have a favorite one. Veteran players and teachers will tell you that choosing a slide lubricant is a lot like choosing a mouthpiece: if you find one that does what you want it to do, use it. Don't be afraid to experiment with other types of lubricants as you become more familiar with your instrument.

Here's a rule that applies no matter what type of slide lubricant you use: *Don't use too much.* The key to fast action of a dent-free, well-aligned slide is to have a thin film of lubricant between your inner and outer slide tubes. After you've applied your choice of lubricant a few times, you'll develop a feel for how much to use.

**Caution!** Here are a few points to remember when you disassemble any slide and wipe it down, no matter what lubricant you're using:

- **Never** lean the entire slide or the separated parts against a wall or anywhere they might fall or be knocked over.
- **Never** lay the entire slide or the separated parts on the floor or across a chair or couch, where someone may step or sit on them.
- **Always** put the separate part on a flat, solid surface, even if you have to put the outer slide back in the case while you work on the inner slide.
Slide oil

At one time slide oil was used by almost every beginner and even by some professionals, and it still comes packaged with many new trombones. Oil has the advantage of being easy to apply and less messy than slide cream, which is applied by rubbing it on the inner slide tubes with your fingers. Oil also doesn't require that you use water from a spray bottle to keep the slide slick.

It's time to wipe the inner slide clean.

Hold the tube you're going to wipe at the top of the slide brace, where it joins the tube. Using your other hand, wipe the tube from top to bottom with a non-abrasive cloth or towel. It's OK to squeeze the tube with your wiping hand to apply some pressure, but be careful not to twist or push the tube either toward or away from the opposite tube while you wipe: it doesn't take much pressure to put a slide out of alignment. Once you've wiped down the first tube, reverse the slide so that you're grasping the other tube at the top and again wipe from top to bottom.

Now that your inner slide tubes are clean, it's time to apply new oil. Most of what is listed below also applies to putting on other lubricants, but there are differences in the steps, so don't skip any!

1. Lay your inner slide across your lap or hold it parallel to the floor and apply just a couple of drops of oil to the slide stockings -- the raised part of the tube at the bottom. This will allow the oil to roll around to the other side of the stocking.

2. Slide the inner slide into the outer slide, being careful not to twist or otherwise jam the inner slide into the outer slide. (Make sure your spitvalve is on the bottom! Although some professional trombones have top and bottom tubes that are different sizes, most student trombones and many professional ones have tubes that are the same size. It's easy to reverse them.)

3. Operate the slide a few times.

4. Place the spitvalve end of the slide on the floor and pull the inner slides up a few inches. Place a few more drops of oil on each inner tube and operate the slide again.

5. Assemble your horn and play!

NOTE: If your slide sounds or feels scratchy or if the slide drags slightly anywhere in its travel, it's probably a candidate for a thorough cleaning. We'll get to that below, in Bath Time.
Slide creams

Two of the most popular brands of slide creams are Trombotine, which comes in a small tube like toothpaste, and SuperSlick, which comes in a plastic jar. Slide cream takes slightly longer to apply and demands more attention to detail than oil does, and the process is messier than using oil. However, most players agree that cream last longer between applications than oil, and many also think it makes the slide work more smoothly. In addition to cream, you'll need a slide sprayer bottle, which costs just a few dollars. Some players recommend using distilled water, but tap water will do. When you're ready to apply cream, first go back and read the three steps under Caution!, above. Then proceed to step 1, below:

1. Lay your inner slide across your lap or hold it parallel to the floor. Place a small amount of slide cream on the tip of your index finger. Dab the cream along the stocking of one of the tubes. Now, pinching the slide tube between your thumb and index finger, rub the cream around the tube, all the way to the top. Really stretch the cream out -- you should not be able to see any white residue on the tube when you are done.

2. Repeat step 1 on the other tube.

3. Slide the inner slide into the outer slide, being careful not to twist or otherwise jam the inner slide into the outer slide.

4. Operate the slide a few times.

5. Place the spit valve end of the slide on the floor and pull the inner slides up until you can see the stockings. Don't pull the inner slide out of the outer slide, and make sure you don't apply any pressure at the ends of the stockings! Spray the inner tubes at the stockings with the water from your bottle and work the slide again. You can respray your slide as often as is needed.

6. Assemble your horn and play!

Slide-O-Mix

Slide-O-Mix (SOM), a relatively new invention, uses two complimentary products to lubricate the slide. For simplicity, we'll call them the large bottle (somewhat milky liquid) and the small bottle (clear liquid). A word of warning for those trying SOM for the first time: almost all players agree that to get the full benefit of SOM, you MUST start with a perfectly clean slide -- one that has been washed thoroughly inside and out. If you're planning to use SOM, skip down to Bath Time and follow the instructions for cleaning your slide first. Then come back here.

1. Lay your inner slide across your lap or hold it parallel to the floor and put 1 drop of the clear liquid from the small SOM bottle on the stocking of each of your inner slide tubes.

2. Slide the inner slide into the outer slide, being careful not to twist or otherwise jam the inner slide into the outer slide.

3. Operate the slide a few times.

4. Place the spit valve end of the slide on the floor and pull the inner slides up until you can see the
stockings. Don't pull the inner slide out of the outer slide, and make sure you don't apply any pressure at the ends of the stockings! Place 1 drop of the milky liquid from the large SOM bottle onto each of the slide stockings.

5. Continue to hold the slide open and, pinching the inner tube between the thumb and index finger of your other hand, rub the milky SOM liquid along the length of each tube. Spray the inner tubes at the stockings with the water from your bottle and work the slide again.

6. Assemble your horn and play!

Most players agree that SOM works best on slides that have a relatively small gap between the inner and outer slide tubes, while creams and oil work best on slides that have a larger gaps. But again, only you can decide what which lubricant works best for you.

**Bath Time**

Sooner or later, no matter how well you take care of your horn, it's going to need a bath. If this is a new horn or a used horn that has been cleaned before it came to you and you don't play more than an hour a day, you may be able to go a month or longer between cleanings. But if your slide sounds scratchy it's usually a good indication that the brass outer tubes have begun to get dirty inside. It's not hard to clean a trombone, but be prepared to spend at least 20 minutes to do it correctly. And, as always, BE CAREFUL when disassembling and handling your trombone.

**Breakdown**

First, let's see what a disassembled trombone looks like. Because most players use a "straight "tenor trombone, meaning one with no F attachment, that's what we've pictured.

This trombone has four parts: the (A) inner and (B) outer slides, the (C) tuning slide, and the (D) bell section. You may or may not have a removable counterweight on your horn (this one has one). You can remove the weight, but it isn't necessary. Because you don't use a lubricant inside the bell section the way
you do on the slide, it usually is far less dirty than a slide section, so you will wash it less often. Before you get started, you'll need some basic cleaning tools. We've pictured the ones you'll use most.

1. A flexible **brush or snake** with a small brushes at each end.
2. A **trombone slide cleaning rod**. This straight piece of inflexible metal has one looped end and one flat end that has an eyelet or slot.
3. **Cheesecloth** (available in hardware and grocery stores) or an old bedsheet or other thin fabric that you can tear into strips. You'll wrap these strips of material around the cleaning rod.
4. A **mild liquid detergent** -- usually dish soap (without bleach or hand conditioners).
5. A couple of old bath-size towels and a washcloth.
6. A **mouthpiece brush** -- a small, tapered brush that you'll use to keep the inside of your mouthpiece stem clean.
7. Some kind of **tuning slide lubricating grease** to replace what you'll wash off.

**Preparing the Bathtub**

Now that you've collected all this stuff, let's go look at your bathtub. If you don't have a bathroom with a tub, a large kitchen or bathroom sink or laundry sink will do, but the whole process will be a lot less sloppy if you have a tub. First, close the tub drain and begin running lukewarm -- NOT HOT -- water into the tub. (Hot water will strip the lacquer off your horn.) Run enough water to cover the slide tubes completely when they are lying flat in the tub, about 4 inches. Place the towel in the water so that it covers the bottom of the tub (this prevents scratches).

Lay the pieces of your horn gently on the bottom of the tub. Let the slide soak while you clean the bell section, but be careful not to bump the slide with the other pieces of the horn while you're cleaning.

Put a small amount of soap into the ends of the bell where the tuning slide used to be, and also into the tuning slide itself. Run the snake through the openings in the bell section and also through the tuning slide. Put a small amount of soap on the wet washcloth and clean the slide grease from the legs of the tuning slide, which fit into the bell section. You can use the soap and your hands or the washcloth to clean off any spots on the outside of the horn. Be careful not to scratch the lacquer! Now, rinse the bell section inside and out and place it on the other bath towel, a safe distance from where you're working, to drain. It's time to clean the slide.

**NOTE:** Remember not to twist or otherwise put pressure on either the inner or outer slide when they are assembled or disassembled. The slightest bend or dent can cause major problems with your slide action. The inner tubes must be parallel to each other in order for them to work without dragging.

**Inner slide**

1. Reassemble the slide -- don't worry about the water in the outer tubes.
2. Hold the assembled slide upright with the slide bumper on the bottom of the tub.
3. Put a small amount of soap into the opening for each inner slide tube (one where the mouthpiece goes in, one where the slide and bell go together).

4. Put one end of the snake into one of the tubes. If it's a metal snake, try to keep the metal from scraping the sides of the top of the tubes by grasping the top of the tube and the snake in your fist, then feeding the snake through it with your other hand.

5. Push and pull the snake up and down in the tube for a minute or so, allowing the brush to scrub the interior. When you come to the bottom of the tube, STOP. Don't force the snake around the slide crook.

6. Repeat step 5 on the other tube.

7. Turn on the lukewarm water again. Holding the slide by one of the tubes at the brace, close your fist around the tub spout so that water is forced, under pressure, through the slide and back out the other tube (see picture). Allow the water to run through until it comes out clear.

8. Separate the inner and outer slides again. Lay the outer slide back underwater on the towel.

9. Put some soap on your hand or on the washcloth and wash down the outside chrome plating of the inner slides. Rinse with lukewarm water and set it aside to dry on the towel where you already put the bell pieces. Now you're ready to clean the outer slide.

**Outer slide**

1. Pull the outer slide out from under the water and hold it vertically just above the water line. Open the spitvalve and let the water drain.

2. Put a small amount of soap into each slide tube and, holding it as you did when using the snake in step 4 above, insert the snake into one of the tubes.
3. Push and pull the snake up and down in the tube for a minute or so, allowing the brush to scrub the interior. When you come to the bottom the tube, STOP. Don't force the snake around the slide crook.

4. Repeat step 4 on the other tube.

5. Using the method described in step 7 under cleaning the inner slide, rinse out the outer slide until the water runs clear. If the water NEVER runs clear, you've got one dirty slide and will probably have to use brass cleaner. How to do this is described below.

6. Lay the slide back under water and get your cheesecloth and cleaning rod.

7. The cheesecloth should be cut or torn into a strip that's about 6 inches longer than the cleaning rod and about 6 inches wide. Insert one end of the cloth through the eyelet in the rod and wrap the rest of the cloth around the rod, making sure that no metal sticks out (see pictures). You should have enough cloth left at the loop end of the rod so that you can hold the rod and the cloth at the same time. NEVER let go of the cloth while your cleaning the slide.

8. Hold one slide tube at the brace, as you did when wiping down the inner tubes before applying lubricant (described above). ALWAYS work on the tube you're holding, not the other. Carefully insert the end of the rod into the top of the tube, where you're holding it. It should fit snugly but not so tight that you have to force it into the tube. If it's too tight, you've got too wide a strip of cloth. If it's too loose, you won't get any of the cleaning action of the cheesecloth. Either way, you'll have to rewrap until it the rod fits snugly.

9. Push and pull the rod up and down in the slide tube. Again, NEVER let go of the top of the cloth that is at the loop end of the rod. If the cheesecloth comes out clean, you're in good shape. If it comes out black or green, you'll have to redo the cleaning process with brass polish.

10. Repeat steps 8 & 9 on the other tube.

11. If both tubes are clean, put the outer slide down along with the other parts of the horn and get ready to reassemble it. If you need to reclean, see "Brass Polish," below.

Reassembly

Use a towel to remove any remaining water from the outside of the trombone. Start with the bell section. Apply a thin film of tuning slide grease to the tuning slide legs and carefully insert both of the legs into the bell at the same time. You may have to rock the legs slightly back and forth to get them to go back into the bell section. When you have the tuning slide back where it belongs, you're ready to follow the instructions for applying whatever slide lubricant you've chose. Steps for applying the three most popular types are detailed in Slide Lubrication near the top of this page.

Now you're ready to lubricate and reassemble your slide following the instructions near the top of this page.

One more piece of cleaning advice: rinse and clean your mouthpiece using soap and water and a
mouthpiece brush at least once a week. And don't forget to brush your teeth before playing, too!

But what if ...?

What if you take good care of your slide and it still isn't as fast as lightning? Well, even if you've followed our cleaning instructions and kept your slide well lubricated and protected, it still may need the services of a professional brass technician.

In that case, it's time to visit your local repair shop. Slides are delicate instruments. If dropped, bumped or even nudged, they can be dented, flattened or knocked out of alignment. Even dents that can't be seen can be felt. A good, experienced trombone technician can tell just by looking if your slide needs help. Prices for alignment, dent removal and other slide work vary widely, so if you're fortunate enough to have several shops in your area, look around. Once you have found a technician who does good work at a fair price treat that person like gold and tell others.

We hope you've found this information easy to understand and helpful. If there's something missing, let us know! Questions and comments are always welcome.

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