Setting the clutch cable slack is not only easy to do, it's necessary if you want your clutch to work properly and last a long time.

For your clutch to work correctly there has to be the proper amount of slack in the cable, if there's too little slack the clutch plates won't be fully pressed together when the lever is out and you're clutch might slip.

If that starts to happen you're going to glaze your clutch plates and then you're going to have to replace them.

If there's too much cable slack you won't get full disengagement when you pull the lever in, that's going to make it hard to shift gear and the bike might creep when you're sitting at a standstill with the transmission in gear.

To check the free play you're going to need a tape measure or a **vernier caliper** and you're going to need a cold engine. That's because hot clutch plates will expand slightly and throw your measurement off.

Typically you're going to measure from the end of the lever to the grip or between the back of the lever and the lever perch, but you should check your workshop manual for the specific protocol and measurement for your bike.

As a rule, three to four millimeters is a good goal and generally speaking it's better to have too much slack than too little.

If you need to adjust the slack there are two places to do it. You've got a **barrel adjuster on the handlebar** and then instead of lock nuts down at the engine for bigger changes try working with the barrel first.

If you can't get the right amount of slack screw it all the way into the purge and then turn the lock nuts down at the engine to bring the free play into spec.

Keep in mind that for maximum leverage and ease of use you should maintain an 80 to 90-degree angle between the clutch arm and the cable.

That's how you check and adjust your clutch lever free play, pretty easy right?

Because it's so easy once you've done it with a ruler or a caliper a few times you should be able to adjust it entirely by feel.

In every case, you should check your manual to see what the maintenance interval is, though again, as a rule, it's about every thousand miles.

While the free play spec is obviously important it's okay to stray from the spec and adjust the slack to suit your hand size or your preference for engagement point or lever.

Just make sure that if you do that the clutch can still fully engage and disengage when the engines hot.

How To Adjust Hydraulic Brake Levers

Most motorcycles have cable actuated clutches but some bikes have hydraulic clutches, what's the difference?

With a cable, clutch lever force is transferred via a Bowden cable which has strands of steel running inside of a flexible sheath.

With a **hydraulic clutch** fluid is used to convey force in the same way that your hydraulic brakes work, except instead of there being a caliper at the other end of a hose there's a slave cylinder.

That works on the clutches pressure plate the same way a cable does if a cable clutch and a hydraulic clutch do the same thing.

Why would a manufacturer or a rider choose one over the other?

Each system has its pros and cons but we'll start with the cable clutch because it's the most common. Cables are common for one very simple reason, they are cheap to make and easy to fit.

That's a big benefit whether you're manufacturing motorcycles or just maintaining your own bike. On the topic of maintenance, cables require a fair amount of it. For starters, you have to adjust the cable tension regularly to account for clutch wear and cable stretch.

Too loose and you won't get complete clutch engagement when you pull on the lever, too little slack and you're going to get a clutch slip which is going to fry your clutch plates.

Cables need periodic lubrication and they're susceptible to corrosion and breakage and binding if they're bent too sharply.

On the other hand, you don't have to worry about messy lubricants or fraying cables with a hydraulic clutch and you don't have to worry about adjusting anything either.

That's because as long as there's fluid in the reservoir the hydraulic system will self adjust for clutch wear.

The engagement point remains the same throughout the life of the clutch. Speaking of engagement, hydraulic clutches tend to be easier to modulate and offer a lighter more consistent lever pull since there are a master cylinder and a slave cylinder amplifying your grip strength

That is a lot of pluses for hydraulic actuation but this setup is expensive both to build initially and to repair later.

If a seal fails and while you don't have to fuss with cable adjustment all the time for those hydraulic systems that use brake fluid you're going to need to replace it every couple of years.

That being said, what if your bike has a cable but you are convinced you want hydraulic?

Well, you are in luck because Magura has the **HYMEC conversion kit**. I know HYMEC sounds like a maneuver you'd perform on someone that's choking on a chicken bone but it stands for hydraulic from mechanical which is exactly what this kit does.

It allows you to convert your cable clutch to a hydraulic setup. It offers all the benefits of a hydraulic system and it comes fully assembled, pre-bled and ready to install.

Because it uses mineral oil instead of hygroscopic brake fluid you never have to replace the fluid so it's maintenance-free. Magura has HYMEC kits for lots of motorcycles and they're adding more all the time.

So there you have it, a snapshot of the pros and cons of the two kinds of clutch actuation.

If you want to know more about clutches like how they work or how a slipper clutch works or the difference between a wet and a dry clutch comment below and we will write a new article based on your requests.