

SUZUKI CAVALCADE OWNERS GROUP NEWSLETTER

July, 2006

IF YOU DO NOT WISH TO RECEIVE FUTURE MONTHLY ISSUES OF THIS NEWSLETTER, send me an e-mail with the subject field phrase "No Future Issues". My e-mail address is jay@treefarmtapes.com

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**RIDES AND EVENTS:**  
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**20th Anniversary National Cavalcade Rally
"CADE RAID 2006"**

September 11-15, 2006 ~ Golden, Colorado

Cade Raid 2006 is just around the corner. But, there is still time to reserve your place with other Cavalcade owners from across North America (& New Zealand) for our week of rides, instruction, fellowship and entertainment.

Email jay@suzukicavalcade.com for a registration form to attend Cade Raid 2006. Reserve the week of September 11-15, 2006 at the Holiday Inn in Golden, Colorado. When you call for reservations, (303-279-7611) be sure to identify yourself as with the Suzuki Cavalcade Owners attending "Cade Raid 2006" to receive our special room rate of \$70 per night.

CADE RAID 2006 ACTIVITIES

The schedule of events for our Cavalcade rally next September is complete. Here is part what we have planned for our big 20th anniversary celebration.

Monday through Friday Daytimes ~ Daily Classes, Rides and a Safety Training Course designed for Cavalcade riders. We'll also have special activities for spouses and passengers planned by Nancy Dilldine and Cathi Hughes for all the ladies attending. The Cavalcade Store will be open where you can buy and sell items and parts for your Cavalcades. Improve and update your Cavalcade with hands-on instruction by knowledgeable Cavalcade mechanics including Tracy Presnell.

Monday Evening ~ Dessert Bar-Welcome to Colorado! ~ We are going to have an evening get-together to allow everyone to mingle and get to know each other. I'm still working with the hotel to plan this event. I'll have the details soon, but for now let's just say it's going to be informal, fun and not particularly low calorie.

Wednesday Evening ~ Dinner & a Show... We are planning a dinner at the hotel followed by an evening with an authentic western cowboy legend, Wild Bill Hickok, in person. Actually in the person of a descendant of Wild Bill who portrays his famous ancestor scout, gambler and lawman. This remarkable re-enactment will bring alive the history of the old west.

Friday Evening ~ The Cade Raid Dinner ~ The chef at the Holiday Inn in Golden, CO is planning an outstanding meal. Plus, the usual Cade Raid performers; Jay, Tracy, Spike and Motherwind will entertain you with all new performances for 2006. Plus, we will have some new entertainment from the ranks of the Cavalcade owners. We will also present some awards and prizes. This is our traditional finale to wrap up a week of Cade Raid. It's our one last group gathering before that long ride home.

For your registration form, email jay@treefarmtapes.com Registration is \$65 for bike and rider, \$45 for a passenger. This includes all activities except the Wednesday and Friday dinners and the Rider's Training Course. Your registration also includes an event tee-shirt and pin. You can reserve your guest room by calling Holiday Inn-Denver West (303-279-7611). We have a special group rate of just \$70 per night. Be sure to identify yourself as attending the Suzuki Cavalcade Group's Cade Raid 2006. Be sure to reserve the week of September 11-15, 2006 for our Cavalcade Rally at Golden, Colorado. It's our 20-year celebration event!

TAIL OF THE DRAGON IN SEPTEMBER

Hello, I am planning a trip to Key West Florida, to arrive on Sept 30, 2006. I will be crossing into the US at Port Huron Mi. I read about the tail of the dragon (129) in TN & NC. (www.tailofthedragon.com) and think I'll include it on my way. Anyone interested in hooking up around Sept. 26/27?
Email: pokher_ace@yahoo.ca

If you are going to do the Dragon, make sure you take the time and do the Cherahola Skyway. I think this road is better than the Dragon. The Dragon is 318 turns in 11 miles. The Cherahola Skyway is more long sweeping turns at nice speeds, so twisties also. It is located near the Dragon also, so it makes it nice.
~Tom (1986 LXE in Alabama)

Don't forget to take in at least a portion of the Blue Ridge Parkway too. The Dragon was fun, but the BRP was the most scenic part of our trip last year. We'd love to do it again someday! ~Ed

IF YOU ARE PLANNING A RIDE, RALLY, OR OTHER MOTORCYCLE EVENT

of interest to the membership of the Suzuki Cavalcade Owners Group, send the information to jay@treefarmtapes.com and it will be posted in the next issue of this newsletter.

~ TRIPS AND TIPS ~

BODY WORK

Several years ago I re-did my side panels. After I welded the cracks I lined the inside with a PVC sheet material. (PVC pan material used as a shower lining when making custom shower bases) The PVC material is non-hardening and easily glued to the underside of the panel. It added strength to the old ABS plastic and kept it from re-cracking. I was pleased with how it worked. After I re-painted the panels, they were as good as new. ~Gary

PULLING THE DRIVESHAFT

OK. I guess I'm going to have to actually pull my driveshaft to pinpoint my noise. I remember some discussion some time back about the swing arm removal and some things to watch for and be careful to avoid. Of course I can't find those e-mails now so how about guys. How big of an ordeal is it to get the driveshaft out and back in? ~Jim Nelson, Madison, WV, '86 LX, 102,000 miles

Jim, at 102,000 miles, it is a real good possibility that the driveshaft joint is making the noise. As stated by others, it is pretty much a job of removing bolts and stuff and not damaging leveler sensor. THEN the shaft will pull out from the front. I would advise you of this.---The bolts that hold the bearings (swing arm pivot).- after you loosen the lock nut, back out a few turns at a time equally on each side and count the number of turns until you can drop front of swing arm. This will make it a bit easier when reinstalling so

you can center swing arm laterally. Write it down!! You will forget the number if you don't. Be careful that the bearings don't fall out into the dirt on your floor. You will have to kinda tilt the swing arm if you are taking it out from under the bike. I did not mention you need to undo brake line to fully remove swing arm from bike.

Now for the fun part. Do not forget to put the driveshaft back in before you reassemble everything-or you will be very disappointed with the results! Inspect the bearings and raceways and replace if needed. Be sure to "schmutz" up the bearing assemblies, (That is how us Dutchmen say "use plenty of grease on 'em.") Replace the rubber boot if cracked. When you tighten the bolts that hold the bearings tighten same number of turns as when you loosened-do not tighten the locknut. Use a feeler gage on each side of the swing arm to be sure it is centered perfectly in the bike frame. Obviously you need to now forget about your count and adjust for the swing arm to be "snug" in moving up and down, with no binds and no side play. Then carefully tighten lock nuts, Recheck adjustments... It must be centered or the shaft will hit the sides. Now hook up the rest of the stuff and reassemble. Work slowly, carefully, recheck everything and BE SAFE! ~Richard '86

I will add something to what Richard has written. When you put the new d-shaft in (assuming that you end up needing one) the old "turns" setting probably won't be right anyway as the new joint is bigger and you will probably hafta adjust it to get it to not hit on the inside of the tube. You will want to set the preload of the bearings when you put the swing arm back in. Hey, if it was me, I would just yank the secondary and take it out the front. For me it's a lot easier to do it that way. ~Tracy

ROAD FIX FOR THE STATOR

Jay, if you or Tracy or someone is in the mood to do a good deed, we should explain to the group what to do if your stator goes out on the way to Colorado. It need not be the end of your tour. You can pull the fuses out of everything except the engine and then ride it on the battery to get to the next exit that has car batteries. Tracy or one of the other wrenches might explain how to put a car battery in the side bag and wire it in parallel with your fairing battery with a cable running under the seat. Then you can charge the car battery in the evening in the hotel room over night for the duration of the trip, or change the stator in the parking lot, if Tracy brings some spares. Or you can carry a spare stator and water pump, which is what I do whenever I go on a trip. If we have fifty bikes as we had in Branson, my statistics estimate that there is about a 40% chance that at least one of the bikes will lose a stator on the way to Colorado. Check dem oil levels, all of 'em, before you take off. Your stator has a better chance of going the distance if you fill to the full oil level or even *a little* above it. ~spike

I will have stators and regulators and water pumps at the Cade Raid in Colorado. A stator can be changed on the road but you are best off to splice the wires up behind the side panel versus trying to run them all the way up to the reg. I don't see a problem with that if you do a good job of it. Don't try and splice it by the stator cover, I've seen that done before and it simply gets too hot down there and it's hard to do a good job.

Using a car battery is actually pretty easy. You just sit it in the saddlebag and run a couple of wires up to the main battery. You can trickle charge them at night and it should run the bike for quite awhile if you pull the headlight fuse. One guy that did it wired in a cigarette lighter and used a plug in voltmeter to monitor the voltage so that he didn't get it too low and get stranded even with the car battery. You might have the place of purchase put a quick charge on it so that you get to start off with as much juice as possible.

The oil level being a little high isn't really going to help any. Once the oil is pumping the level drops down a ways and it's not like you could get it high enough that it would actually allow the stator to be

sitting in oil. Besides that, it's always the upper quadrant that burns out. There's very little oil spray up there. The only way to offset that would be to have a couple 3 extra quarts in it and that would have other non-desirable consequences. ~Tracy

FLAT FRONT TIRE

I just noticed a flat front tire on the Cade when I got back from work tonight. What might I need to pick up in order to use the Cade's compressor in order to get me 2 miles down the road to the bike shop? Otherwise it \$100.00 for a tow. ~Steven C. Di Pietro

Steven, it depends on why it's flat. But, for nail holes, there are flat fix kits. I use a tapered screw type. The kits come with several sizes and glue and a roughing tool. They screw in with a Phillips screw driver. Flat Fix is a pressurized can with sealant. You can keep one in the bags. I have driven six miles on a flat front tire, two up. Dunlop Elite II with a nail in it. Put the screw plug in it and aired it up and away we went. Now I never go anywhere without the plugs and my air hose. ~Red

Well, if you have a compressor switch (green button on inner fairing) then you just need something to repair the tire from the outside (like Red suggested) and an air hose that will connect the compressor outlet to the tire. The hoses are common for Gold Wings and are about \$10-15. If you don't have a compressor switch, you can get it to run by putting a bit of wire into the 2 prong connector near the compressor. That will allow the compressor to run and pressurize the tank without airing up the seats or shocks. ~Tracy

Since the hose fitting is pressurized whenever the compressor runs, all you really need is a hose & a way to run the compressor w/o opening any valves. And that's easy. Remove the coin/ storage compartment above the compressor, four screws. On top of the compressor, you'll see a solenoid. Disconnect the blue/ white stripe wire. Press any seat switch. The compressor runs but the seat valve doesn't open so all the pressure goes to the hose fitting. ~Ed

INSTALLING SWING ARM BEARINGS

I have just installed new swing arm bearings. Torqued bearing bolts to spec. I have no discernable side to side movement. Up and down movement is very free, much more so than previously noticed even though the old bearings were not that bad. In a previous note it was mentioned that the swing arm movement should be snug. I assume that this means that there should be some resistance involved. Any thoughts on swing arm installation or proper fit appreciated. ~George in IL.

I dunno that snug is a good term. There should be some slight drag that lets you know that the bearings have been properly preloaded. On tapered roller bearings you really need to take them beyond the required torque spec and then back them off loose then take them up to the required torque. That helps seat the bearings. Anyway, a slight drag is okay. Snug is probably too tight. It's kinda like steering head bearings. There's a torque spec but I never use it. I get it to where it feels right (been doing this a long time). ~Tracy

George, as long as swing arm moves up and down freely and does not have any binds or side play, you got it! You have, of course, greased the bearing very well and adjusted the bolt to 2.5 to 3.0 lb-ft and the nut to 79.5 to 94.0 lb-ft. Of importance also is to be sure the swing arm is centered laterally in the frame of the bike to be sure the driveshaft does not hit the sides of the tube. I use a feeler gage to check this adjustment. ~Richard '86

Richard, I greased those babies with high temp wheel bearing grease. I don't think that the swing arm would get all that hot, but I used the good stuff anyway. It sure seems like there should be a rubber cover over the ends of the swing arm to keep the dirt out, but there isn't (unless I missed something).
~George in IL

I just had mine off checking the drive-shaft and when I tried it out afterward my u-joint was rubbing the housing. Moved it to the left 1/2 turn and it was much worse. Moved it back and then to the right 1/2 turn and that took care of it. Just thought you might need to know that when you are finished. ~Jim Nelson, Madison, WV

Jim, Did you have the swing arm centered after you checked your drive shaft? I'm just wondering if centering is going to necessarily work. It would seem that if it were just pretty darn close that there would be enough play inside the housing to accommodate for a small amount of variation, unless the drive shaft isn't centered in the housing to begin with. ~George.

Tracy, I was wondering about pre-loading, but I wasn't really sure what the term meant. I think that I was getting pre-loading and un-sprung weight confused. From your explanation, I gather that it is loading the bearings with a higher pressure than normal then releasing and re-tightening to the desired pressure. Would you say that twice normal pressure for pre-loading would be about right? I take it that you would prefer to feel some slight drag as opposed to totally free motion even without side to side movement?
~George.

George, Actually, preload is the tightening of the bearings past 0 interference, not tightening and then loosening. Tapered roller bearings are known for their ability to have zero play in them because with angular contact you can actually have them tighter. Normally, you will have a spacer between the bearings and the length of that spacer determines how tight the assembly will rotate after it's all torqued up. The secondary uses 2 pairs of opposed taper bearings and each set has to have the preload set by using the right thickness spacers in between the bearings. In that case, the torque is measured in inch lbs as the amount of force it takes to turn the gear after it's been torqued up.

With the swing arm it's a little different. Since you don't have a fixed length spacer between them (the driveshaft tube flexes a lot), and the frame will spread if you tighten them too much, you have to use a torque value in the foot lbs of how tight to get them. The only thing I don't like about that is that you have to take into consideration the friction of the threads. I would rather snug them up by feel instead of using a torque wrench. That's just my way as I've done enough of this that I rarely use a torque wrench (unless I'm bolting the bottom end back on a motor or something).

Tightening them up past where they will end up makes sure that the races and bearings are fully seated. Then you back them off loose. Then when you torque them, all of the force is being used to set the preload and not take up any other slack. The swing arm is going to be pretty free with new/packed bearings even at the low value that they spec for preload. However, a little resistance (probably only felt on upward movement since the swing arm is heavy and falls freely) is fine and it lets you know that all the slack is out. ~Tracy

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~ TRACY'S BENCH ~  
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PREMIUM VS. REGULAR UNLEADED

Tracy, When I put Premium fuels in my bike, my bike is faster, runs smoother and I believe I get better fuel mileage. I can offer no tested proof, but that's why we have people like Spike to figure these problems out. I'm not in the habit of disagreeing with you, but I think it's time to go back to the drawing board, regarding this issue. ~Frank in Colorado

Higher octane rated fuel does not make more power. Period! That's not my opinion, it's fact. Higher octane fuels burns slower, that's why they are less prone to detonation. Lots of tests have been done on normal motors with regular octane to high octane to really high octane with the higher octane fuels making virtually the same power or in some cases less.

Sorry, we'll have to disagree on this. The octane rating of the Premium fuel is not making more power. There may be other things about the Premium fuel that are helping make your motor run better but it's not due to the octane rating.

This link gives a pretty good explanation of it http://en.wikipedia.org/wiki/Octane_rating . There is a small blurb in there about how they can formulate fuel to have more power and higher octane at the same time. But, it's not the octane rating that's doing it. I guess I would modify my original comments to state "higher octane" instead of "Premium" as premium may have additional formulation differences than just octane. ~Tracy

A LITTLE HISTORY LESSON

Had a guy come in for some service work yesterday. He's a regular customer that brings his bike from Dodge City, KS (about 2 1/2 hours) for me to work on. A very nice guy with an immaculate dark brown 86 LX. As I was doing the service, we were talking about when he got the bike and the recalls and such and he brought up the fact that he used to belong to LeMans America (a group primarily made up of GT750 Water Buffalo owners). He then remembered a newsletter of that organization that discussed the secondary plug in the Cavalcade (bikes other than the GT 750 were welcome in the group).

I was intrigued by that and asked if he could send me a copy when he got back home so that I could post it along with the other information on the plug. He asked that I wait a minute while he rifled through the stuff we had taken out of his saddlebags. He then produced a copy of the page out of the newsletter that discussed the plug issue. The newsletter was dated January 1990. It was on page 6 and the short article was written by Tim Miller. The entire text of the article is shown below. I have added a couple of comments of my own.

January 1990

LeMans America Newsletter

V17 N1 Page 6

Tim Miller

Title: Cavalcade Drive Shaft Plug

On a Sunday afternoon not too long ago, I was coming home with my wife Karen on my Cavalcade. Suddenly, the rear wheel of the bike tried to come out from under us in a high-speed right turn. After coming to a very scary, but safe stop, I found oil all over the rear tire. I managed to get home all right, where I found that there was no gear oil in the secondary gear case! Upon further investigation, I found that the rubber plug in the end of the output shaft had fallen out. This allowed the gear oil to run down the inside of the swing arm until it ran out all over the wheel. /(TP comment: luckily, the only thing that happened was gear oil on the tire and not a full-on lockup)/

I called U.S. Suzuki and they said that they are not aware of problems with this plug. Phil Epler, from American Suzuki Customer Relations, said that in my case, the plug may have hardened with age and heat, thus losing its resiliency and falling out. (My bike had 50,000 miles on it at the time.) Phil also told me that the original part number 09241-25004 has been superseded with part number 09241-25006. I hope this means that an improvement was made to prevent a reoccurrence of my exciting ride. /(TP comment: We know that Suzuki eventually lengthened the plug but it remained a rubber-over-steel design that is subject to the same compression set of any over-molded rubber. They weren't aware of any problems yet they redesigned the part to be nearly twice the length)/

Unfortunately, this plug is not very easy to either check or replace. /(TP comment: That's not entirely true. It's actually quite easy to check)/ To get to it, the secondary gear case must be disassembled. /(TP comment: That's not true. The secondary case does not need to be disassembled, however, Tim may have been referring to disassembly as removal from the bike)/ This means that the rear wheel, final drive gear case, and drive shaft must all be removed to get the secondary gear case off the bike. When the secondary gear case is replaced, it would be a very good idea to replace the output seal between the transmission and gear case. This seal is noted for failing, /(TP comment: That's only true if it was improperly installed or is simply worn out)/ which lets engine oil into the secondary until it overflows out the case vent and makes a mess of the left side of the bike. If you already know about this seal and need to replace it, this would be the time to go ahead and check or replace the plug. /(TP comment: Amen. Replace everything back there and rebuild the clutch slave also)/

As noted above, this is not an easy job. You must have a fair amount of mechanical knowledge plus a service manual to do it right. It took me about 5 hours to replace both the plug and the seal. If you have any questions, call me at xxx or Tim Peck at xxx.

End of article.

It's unfortunate that we find ourselves still discussing this issue 16 years later and that rear wheel lockups (not just greasy rear tires) continue to happen. Please everyone, check that secondary level. And please make every effort to inform every Cader that you meet that isn't a part of this group about this issue.

~Tracy

TESTING THE STATOR

I am testing the stator this AM due to voltage at the battery while running 3000 rpm is 12.67. My question is testing the yellow leads. Can I pull apart the 'bullet connections that go to the noise suppressor and test on the stator side? Or do I need to pull apart the white connectors and test there? Also, do I need to mark the leads and make sure they go back together exactly the same? Since the bike has 32000 miles on it, should I just bite the bullet and do both the regulator and the stator? ~Maury

The stator has to be unplugged from the regulator to test it. So, take apart the big connectors, not the ones that go to the noise suppressor. All 3 leads unplugged, set meter on AC volts, put meter leads into 2 stator wires (don't matter which 2), start engine and run up to 5000 RPM. Must have 90 VAC or higher on that pair. Shut off engine. Swap one meter lead to the remaining stator connector. Start engine and 5000 RPM 90 VAC again. Shut off engine, move the meter lead that you didn't move the first time to the other stator lead. Start engine...etc. 3 pairs of stator leads (1-2, 2-3, 1-3) must have 90 VAC else stator is toast. Don't matter how they get plugged back in. All the same. Regulator? Hard to say. They are not as predictable as the stator. Make sure you have ground connector at battery cut out to prevent regulator burn up due to poor ground. ~Tracy

CLEANING IT UP

I need some cleaning help. I bought an 86 LX four days ago. It really has a lot of dust on it. It looks like someone has driven it a lot on a dirt road. Also there seem to be an oil leak somewhere around the round black rubber boot. I cannot locate the exact location of the leak because of all the oil and dust packed around. It seems to drip real close to where the kick stand joint is. My question is... How do I clean all of this gunk off? I am somewhat fearful about using a pressure washer. I have used pressure washers on car engines with a lot of success but I am not sure about this bike. What is my best bet besides rags and 40 hours of work? ~Bill Singer

Please review the article at <http://www.billydump.com/cav/instruct/disclaim.htm>

You probably have a secondary leak from either the output seal or the infamous plug. Solvent, a stiff brush and maybe a toothbrush should clean things up. Please don't continue to ride the bike until you locate and fix the leak. A secondary lockup is a scary to thing to have happen. I just had a bike in here that suffered one and it had grease and dirt caked all over the boot and swing arm which was a clear sign that there was a severe leak. ~Tracy

FORK BRACE

I know I will get a lot of static on this, but here goes. I have the original brace and do not have any problems with it. I just put 550 miles on my motorcycle yesterday and not a problem. I know they could have made it better and it appears that there is some probability that it may fail, but for all 126,000 miles on my Cavalcade it has been fine. I guess what I am saying is don't worry about what you have if it is not failed. If you do, you will surely have an accident. If you order the beefed up one from Tracy, then you can be sure to have the best. Heck, I may do that one day myself. ~Tom (1986 LXE in Alabama but currently in Chicago)

Well Tom, I'll start off with the static. You knew I wouldn't disappoint by being silent. If you want to keep the stock brace and you're comfortable with it then I have no problem with that. I don't like it, but I know you read the messages from this group and you have made a decision about it. I make braces as a safety item. I do it because I have the machinery, the skills, and can offer them up at a nice savings over the only other option (about \$50 less). In my mind that allows guys to get them that might not otherwise because of cost. And, besides being better and stronger than the original, they look good, too. Yeah, I make money when I make braces but I have to, it's part of how I make a living. I feel badly when people want braces and I'm so damn busy that I can't get to them right away because if it was up me I would keep every Cade off the road until they could replace the brace. That's just how strongly I feel about this issue. I don't care if you buy my brace or the Super Brace, as long as you get rid of the stocker.

If you want to apply the "don't sweat it until it breaks" attitude to your own bike, fine, that's your choice. However, and even though it's your opinion and this group is about free _expression of opinions and information, telling others to not worry about something if it hasn't failed puts people in danger when it comes to the stock brace. I suggest that we ask Mike Mills and Virgil Flaherty (and probably others) what it feels like when a stock brace fails. One wonders what was going through their heads when the handlebars went into an uncontrollable tankslapper and then the bike spit them off at speed. Hey, the brace hadn't failed until that exact moment. The moment when they where cranked over into a turn and then in an instant they were on their ass. Not to mention what happened to the bikes, they both ended up with substantial injuries.

We have discussed the brace issue a lot in the group and I think we've saved lives (or a least a lot of hurt). Just like the plug issue, the brace is every bit as important. Yeah, there are a lot of Cades out there running around with the stock plug in place and the stock brace and they may never fail but waiting until

it fails to replace it is, especially after all the attention we've given these issues, is like cleaning a loaded gun.

I wonder what was going through the heads of those that have experienced a secondary lockup when the unit locked solid at speed. Lets ask Laslo and Larry and Clint and Robert (just to name a few) how they felt when it locked up and they fought to keep from falling down in a bad way (even then some did fall down). Maybe the Ohio Cader that had \$50K in medical bills for him and his wife after the secondary locked and they fell down hard could give us some insight into the feeling. And wouldn't it be nice to ask the young lady from the UK how it felt to have an 850 lb Cade come smashing down on her after the secondary locked up and the bike had spit her off. Unfortunately, we can't. She's dead.

Has a failed brace killed anyone? I dunno. But I sure as hell don't want to find out about one and every stock brace that I can relegate to paperweight status means one more bike that's safer. I'm sorry that this became a book and I'm not trying to scare anyone but I want everyone to be aware of this issue and think about it each and every time they swing a leg over their bike. Just like the secondary fluid level. I'm sorry, Tom, but we are really gonna hafta disagree on this one. Have fun in Chicago. ~Tracy

IGNITION SWITCH ISSUES

Old Red has a problem. My turn signals are messing up. When I turn the ignition all the way over to Acc. and back to "on", the turn signals work until I turn the ignition off. If I only turn the ignition to "on", there are no turn signals. The LXE ignition has a red wire separate from the loom that apparently runs the signals since when it is disconnected; I have no signals at all. I have a LX ignition to replace the LXE, but with no extra red wire. If this is merely a hot wire, can't I splice a wire off of any hot wire on my LX ignition and hook it up to the proper butt connector? Ideas of which wire to use? ~Red

The LXE should have had an extra wire for the cornering lights. I don't know why you can't just use another wire. However, there may be an issue with the amount of load on that set of contacts feeding whatever wire you use. You could also just switch a relay on and let it carry the load. Ignition switch problems are starting to appear. The contacts are getting worn enough in some switches that they have to be wiggled and messed with so that things work. I know mine is a little finicky.

I spoke with Suzuki about letting us just buy the switch part on the bottom but I need to follow up with them to see if I can get a quantity. There's just no reason to have to replace the entire assembly about \$100 when the only thing wrong is a \$20 switch that can be unbolted from the main housing. ~Tracy

CHANGING CLUTCH FLUID

Could someone tell me if you need to flush the brake fluid out of the clutch system to change to DOT 4 fluid, or is draining enough? If you need to flush, what do you flush with? DOT 4? Is there a method that should be used for flushing if req. I currently have the slave cylinder removed for a new seal and secondary seals. I have also read the past post on bleeding from the bottom with an oil can and hose. ~George in IL

Just clean out the master cylinder and fill it with DOT 4 and bleed as usual. When you remove the slave, you drain all of the fluid out anyway. Just bleed the master cylinder first (at the upper banjo bolt) till no air there and then bleed it at the bottom. I have done lots of them and never had to resort to any means other than ordinary bleeding. ~Tracy

I'm also having trouble locating the screw that the little washer (that was in the secondary kit) goes on. I have looked on the Cade CD from Tracy, but could not find the generator cover. My bike did not have the washer installed. This washer fits on a cover bolt I believe and is lined with rubber. ~George in IL

The generator cover is that big shiny thing on the left side of the motor (you had to take it off to get the secondary drive off). The black washer goes on the bolt above the "I" in "Suzuki". ~Tracy

Thanks Tracy, Maybe I'll get this thing back together one of these days. I installed the fork brace and the cork yesterday. Ed Siler told me that I would not believe how cheap the old fork brace was when I took it off and he was right. It looks like a thick piece of metal from the front, but when you take it off, its fly weight. Your characterization of it as a POS is decidedly an understatement. Thanks for your attention to detail; all of the parts necessary for the secondary repair were in the kit. Also Ed Siler told me to check the stator for a dark coloration on the coils at the top. There is notable discoloration. It isn't black, but it is definitely darker than the coils at the bottom. It only has about 25k mi. on it. Do you think that it should be changed? If so, what type is best and where are they available? The last stator lasted for 70k. Unfortunately when you don't fix something until it breaks you may be left stranded in Hayes, Kansas. Is there anything else that I should look at while in there? ~George in IL.

Stator's last about 40K miles generally. Discoloration after 25K is pretty normal. If it looks really crusty then you might be getting close but if it's only discolored it's probably okay for awhile yet. Unfortunately, there is no perfect way to tell when or if it will fail. I've seen them go as long as 80 or 90K miles and they looked really bad when they came out. I have been using the Custom Rewinds for all the ones that I replace and that's what I sell in the store. I've had only one problem with one that shorted out in about 1000 miles (an obvious defect) and Gary replaced it with no questions asked. They do a good job and the price is right at \$125 plus return of an old one as a core. Just clean the metal particles off the ignition pickups (they're magnetic) and don't skimp on the sealer around the stator and ignition wire grommets (not sloppy, but generous) where they pass through the cover. I like the import grey sealer (all the brands seem to be about the same) as I've had excellent luck with it. ~Tracy

STRIPPED BOLT

Tracy, Big trouble on the secondary re-install front. While snugging down the Drive Bevel Gear Assembly, The bolt at the top of the unit stripped out. I was getting them good and snug before applying the torque wrench. I don't think that I over tightened them as I was only trying to get them snug. They were super tight when I removed them, so I think that they may have been over-tightened by a mechanic when a cracked engine case was replaced under warranty. I'm also concerned that the other 2 bolts may do the same upon the next re-install because they just didn't feel right when I removed them. I'm hoping that I am not the only one who has had this problem and that you have had some experience with this in the past. Should I drill it out and install a larger bolt, or is there some kind of threaded insert that can be installed? What are my options? ~ George.

P. S. In case you haven't guessed, the stripped bolt is one of the longest bolts that go all the way through to the engine case.

Well, let's make sure we're talking about the same thing before we go on. Did the bolt strip or did the threads strip out of the case? I have seen broken bolts before on the secondary but have not seen any stripped case threads.

If the bolt stripped then just get all new bolts. They are still available. If the threads stripped in the case you have a couple of options. Jerry mentioned helicoils and those will work but there is also a threaded insert that goes into a larger tapped hole. In either case, you would have to drill the existing hole out and tap it to receive the helicoil or threaded insert. There is a thread repair kit from Permatex or Loctite that repairs the threads with a quasi-epoxy mix but I think the stress on those bolts is a little much for that. This has to be done very carefully to make sure that you don't get shavings inside the motor and that it's done straight with the existing hole. ~Tracy

CAN YOU TURN ROTORS?

I was wondering if anybody has tried to have the disks/rotors turned, or if it can't be done? My front brakes are really pulsating. It's bad enough not to use them since replacing the pads. I do know that they are available on Tracy's site and I will go that route if need be. ~T. Moore, '86 Cade

There are a couple of issues.

- 1) There are some thin paper spacers behind the rotors. If not all of those are in place it can cause pulsing.
- 2) Most rotors don't have enough material on them to be turned. You can mike them but I think you will find that they are pretty close to the bottom.
- 3) I would put a dial indicator on them and see if it's a warping or I have also seen some rotors where there was some rust on the bottom quadrant (when a bike had sat for a long time in the same spot) and that changed the surface properties enough that even after the rust is removed they tend to grab at that spot each time it goes around. I have also seen where the surface of the disc gets galled and raises little bits of the disc surface and they catch each time the disc goes around. A sharp chisel and a little sanding usually takes care of it. I have sets in stock if you need some. ~Tracy

REPLACING THE STATOR

Well, the time has come, I think, to replace my stator. My poor Cade left me high and dry the other night in the middle of nowhere at 3am. Good thing I work for a towing company. Anyway, I digress. I have the CD manual from T, but what I am stuck on is where to find the 3 leads to test for the 90VAC, and if found to be bad, then where to find the section of the manual that deals with the stator removal and replacement. ~Chuck

Section 8 of the service manual. ~ You can reach the leads through the right speaker hole and the right flasher hole. I use a couple of pairs of long needle nose pliers to reach in there and unplug things and put the test leads into the connectors. ~Tracy

FORK SPRINGS

T, I believe that my steering head bearings are notched and I am planning to change them in the near future. Do you have a kit for sale for this and would you also change the springs? I don't know that there is anything wrong with them but don't really know how to check them either. If the new ones are that much better than the old ones, maybe I should just change them out. Thoughts? ~George.

George, I can get you a bearing kit for the steering head. I don't keep them at the moment but will in the future. Most bike shops have a source and they will either have a set (many bikes use the same bearing sets) or can order you some. New fork springs are not an absolute necessity. But, heavy riders and or those that notice a considerable amount of front end dive might consider them. They can be tuned to your weight by varying the length of the preload spacer (it's just a length of plastic pipe). Most of the forks I've rebuilt in the last couple of years (too many to count) are way overdue for a fluid change. What comes out of them is some of the nastiest crap you've seen. And there are a lot of forks out there that are leaking and guys don't even know it because the signs can be subtle. I've had guys bring there bikes here and I tell them the forks need to be rebuilt and they are surprised. They leak and the fluid level gets low and the spring rate goes to crap because the air above the fluid contributes to the overall spring rate. I don't know that I answered your question completely but maybe you can glean something out of it. ~Tracy

RENEWING THE FORKS

How can I clean and repaint the front fork? Someone had an article about it. Does anybody have this article? ~Patrick from Belgium

Patrick, If you just want to leave the sanded finish and re-Clearcoat over it, it's easy. Just use some paint remover to get the old finish off. Use plastic tools to prevent marring the finish. Then just clean them well and recoat with clear. If you want to polish them, it just takes some sanding (220 to start and then to 400 and then on to 600 if you like) with wet-or-dry paper lubricated with WD 40 or similar to get the roughness off then on to the polishing wheel. I use emery grade to start and then finish up with brown tripoli. 1/4" sewn buff works pretty well. If you polish them, you probably don't have to recoat as the polished surface doesn't want to corrode like the original sanded finish. ~Tracy

Hi Patrick, When I refinished my fork lowers, I had them apart for seal and bushing change. After filing and sanding bad seems and just smoothing them out, I sent them off to be polished. Then off to the powder coat guy. He recommended using a UV protected clear Powder coat. They look great and have held their shine for over a year now. ~Frank

HARD TO DOWNSHIFT

This is more of an annoyance than anything else but I'm curious to know what might be causing this. Over the winter I installed Barnett springs and sanded the glaze off the clutch plates. Now, when the bike is old (warmed up for a few minutes and then ridden), it up-shifts fine, but it's hard to get it to downshift. Once it's ridden for five or ten minutes, everything is fine. I use Castrol oil in the bike, but I've used it since the bike was new. Any ideas why this is happening now? ~Rick

Change the fluid on the clutch (use DOT 4) only. If the fluid is fairly new then bleed it well at the slave and at the master cylinder. Clean the vent in the master cylinder cap (it gets plugged). Make sure that the pivot in the lever isn't worn out and lubricate it. Make sure that the lever mount isn't turned in such a way that the lever is prevented from going its full travel by hitting the left hand control box or wiring. Lubricate the shifter pivot and the linkage pivots and where the shaft goes through the secondary (use oil or grease, not WD40). You may have a hose expanding some. Wait for a bit and as the plates start to glaze again they will loosen up some. ~Tracy

CHAIN NOISE?

One thing that I noticed was a noise from the cam chain on the left side. Wonder if it is a little to far gone the lack of tension might cause some small vibration possibly. I will be changing mine this winter or sooner if it gets anymore noticeable and will post the change if any. One old timer Suzuki mechanic also said only use the platinum NGK plugs, the other just do not perform as well. I changed mine and he was right smoother through the power band. ~ Alan

Just a couple of things. There is no cam chain on the left side. And, with the tensioners working properly I can't imagine that one of them would make any noise at all. I also can't imagine that you could ever wear one out. However, if you were speaking of the Right side, the water pump chain is known to be a little noisy. It has slop in it naturally and looks like it needs to be replaced but it really doesn't. The good NGK plugs will run well longer than normal plugs. It's worth the price if you ride a lot and don't want to work on it. ~Tracy

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## **CADES FOR SALE**

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Been a change of plans in my world. So the Cavalcade has to go 1986 GV1 65K miles needs paint

battery cassette player is fickle Cruise has never worked everything else is in great order 1000 miles on front tire and rear brakes. Small oil leak around shifter arm. (NEW SEAL WOULD SOLVE IT FAST) clear coat is coming loose in hot spots but clean the bike still looks great. Seat was found BRAND NEW less than a year old Lumber works great. Clear title, everything else works great! I put many hours on this bike but it will rot if I keep it. Asking \$2300. OBO Please call don't mail 972-755-4296 Ask for Scott
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I have a superb '86 with all the goodies you name it this bike as it, radio, 12 CD changer, passenger arm rest, floor board, back rest, sound amplifier. Every things work! (It's my day to day riding bike. It has 37,000 miles, an awesome sound (like a Harley) I want \$4,500.00 "" cash"" no checks please. Price is not negotiable you fly here, pick up the bike and ride it home. My e-mail is jaurdan1@peoplepc.com phone (530)272-6996  
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I have a 1985 Cavalcade GV1400, gold in color, with approximately 30,760 miles on it. I would like to sell it for \$1,800. The bike is located in Temple, NH. If anyone is interested, let me know! Pictures are available upon request. ~Brenda: wphillips61@yahoo.com