

H technical

By Dick Miller

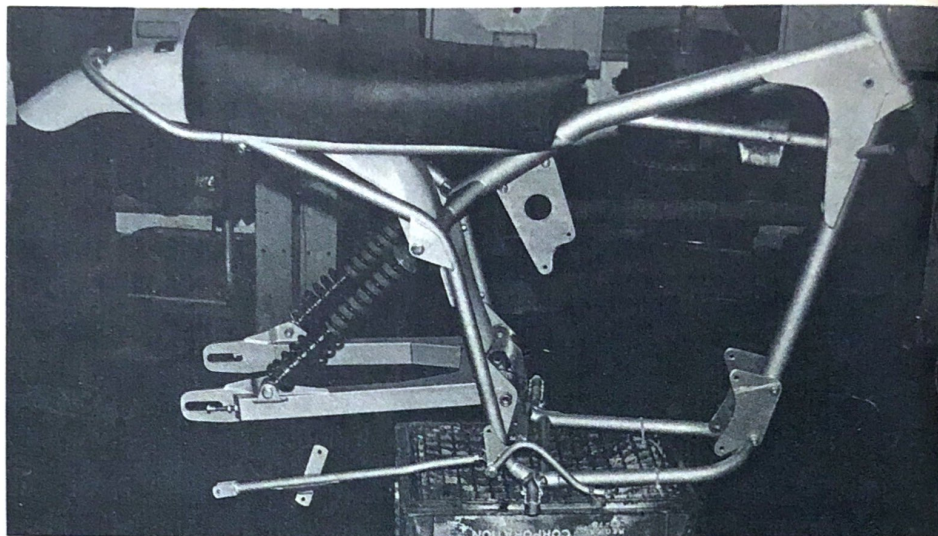
There must be umpteen thousand pre-GP Huskys out there in motocross land either rotting away in garages or relegated to who knows what fate. If you are the owner of one of these would-be relics, there are some alternatives to bring your antique (according to today's standards) up to present-day specs in the suspension department.

Phil Shipley of Mission Hills Motorcycles is the owner of one of the original Husky dealerships in the U.S. Like many previous racers who raced Triumph motorcycles before the influx of the lightweight two-stroke bike into the U.S. market, he picked the Husky because of the right side shifting procedure. Others chose the Bultaco. It took a long time for many of the old-time racers to make the transition from four-stroke to two-stroke and most of these racers narrowed their choice because of a reluctance to shift a bike on the left. At long last, a couple of years ago the industry was standardized and it became law that all motorcycles had to shift on the left and brake on the right in order to be sold in the U.S.

But now the problem is one of suspension, and to be competitive you have to update a bike that is more than a year old. In the case of the Husky, there have been very few changes from the basic frame design of the late '60s till the new GP design just released late last year. Therefore any frame or suspension mods would apply to just about every model. Even the old four-speed machines are still capable of beating the competition with a little work, making it worthwhile to invest some money and time to bring them up to current standards.

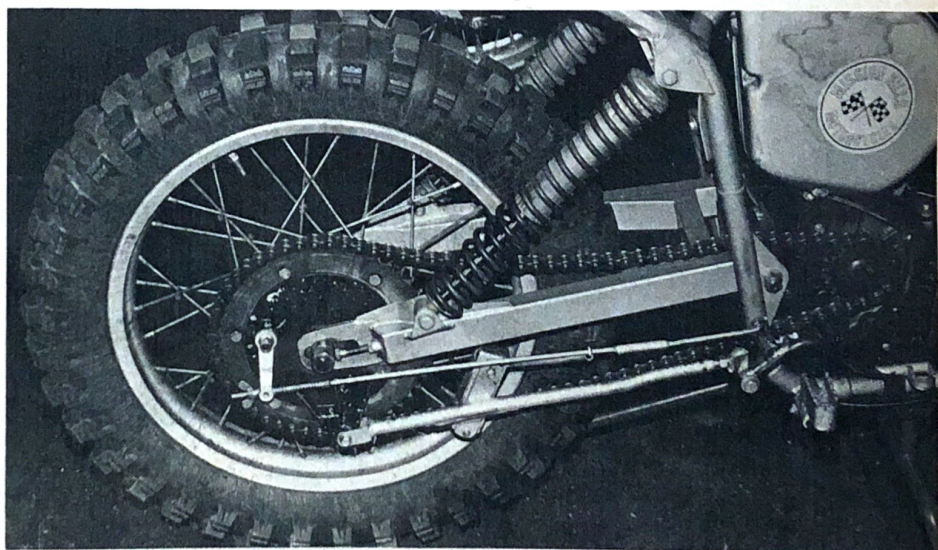
The present new GP Huskys have a completely different frame design for the laydown suspension they use, but this frame will not incorporate the older-style engines in its chassis. Phil has come up with several alternatives if you have an older Husky and want to bring the suspension up to present-day standards.

The Mission Hills GP Replica frame for use with all previous Husky engines and components is a beauty to behold. Welding of the chrome moly tubing is first-rate. What you see here is what you get.



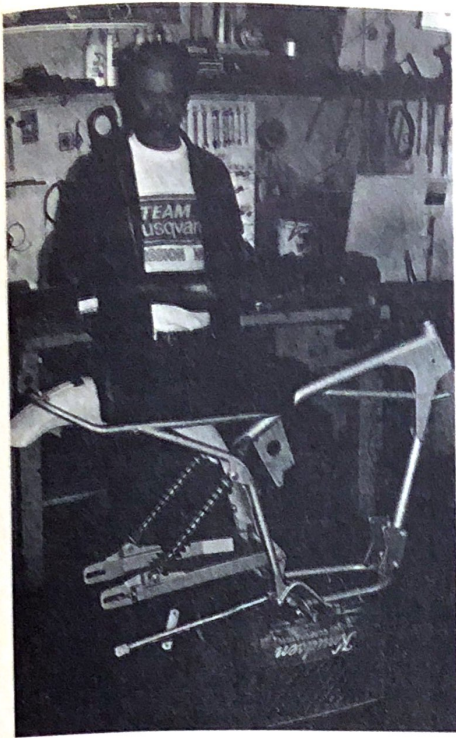
Phil has been racing his prototype frame for several months with a five-speed 400 engine and said that his only problem was the location of the footpegs. They had purposely lowered

them in the prototype to facilitate removing the primary case cover which is a problem with the stock GP unit. All the kit frames have the correct footpeg height.

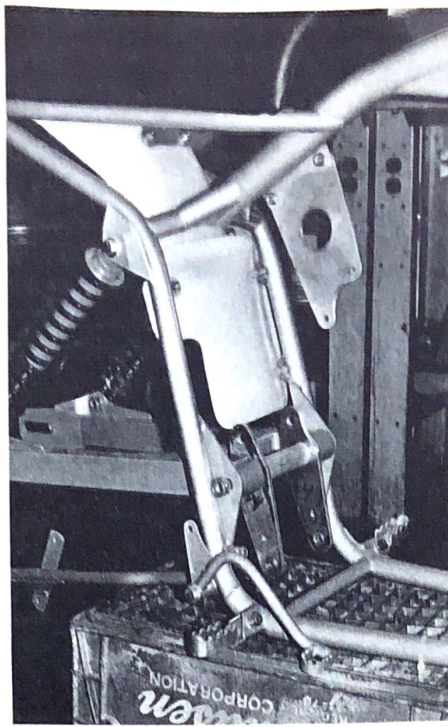


Old Huskys never die, they're just waiting to be rejuvenated

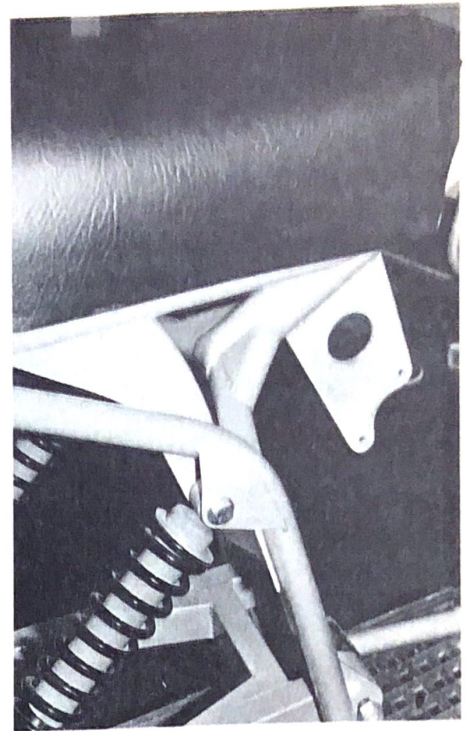
CONVERT YOUR OLD HUSKY TO GP STANDARDS



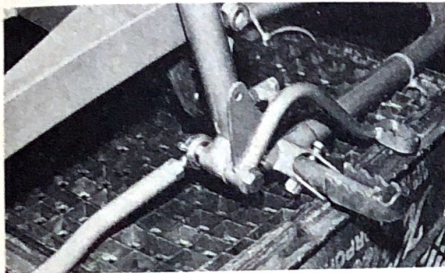
Phil feels the stock pipe with your engine (five-speed) is probably better than the GP pipe he's holding, and saves cutting the fins off the cylinder head. He'll include it for another \$50 if you want it.



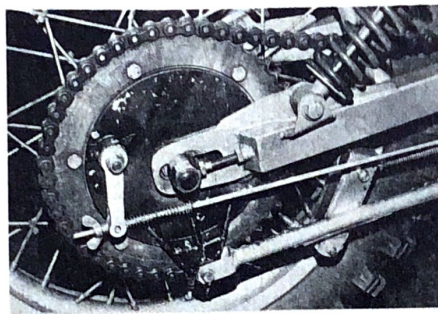
GP seat, fender and splash guard come with the kit, together with the engine plates needed for your particular conversion.



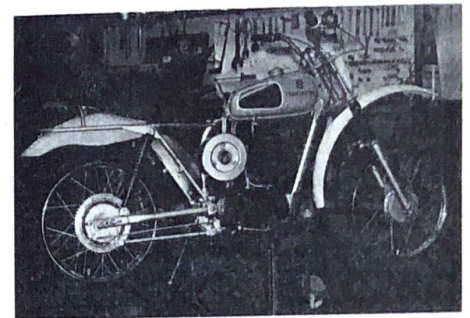
Excellent welding and lightweight gussets are better than stock.



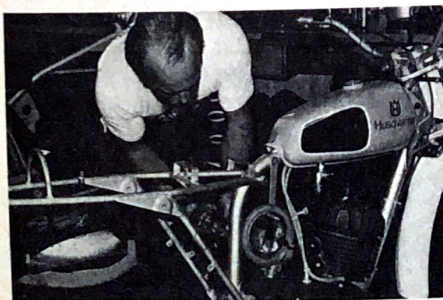
Brake stay arm incorporates a hyme joint where it attaches to the frame. Pegs are serrated and strong.



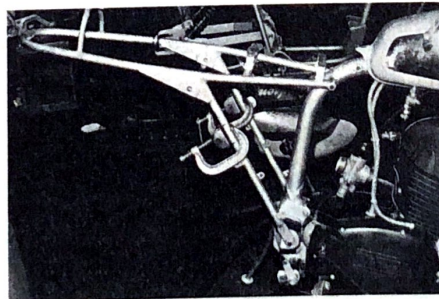
All stock components bolt right to the frame kit. Swingarm is of boxed chrome moly tubing which is the stock GP length but longer than previous Husqvarna swingarms.



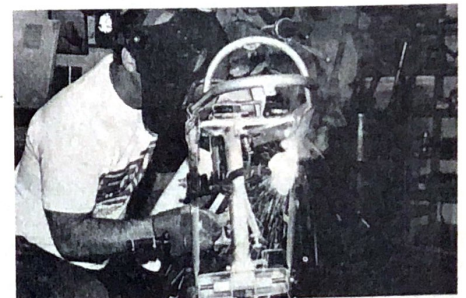
This immaculate '67 Husqvarna is our conversion bike for the Mission Hills laydown kit. Believe it or not, but this scoot has beaucoup miles on it!



Phil removes the seat, swingarm, air cleaner and rear assembly for kit installation.



A locating jig will be included in the kit to line up the brackets for the top shock mounts. Their position has been predetermined and allows for adequate clearance using the 11.9 gas Girlings with the extended swingarm.



Make sure that whoever does your welding uses a heliarc or wire welder such as Phil is using in the photo. This prevents your frame from being weakened from excess heat.

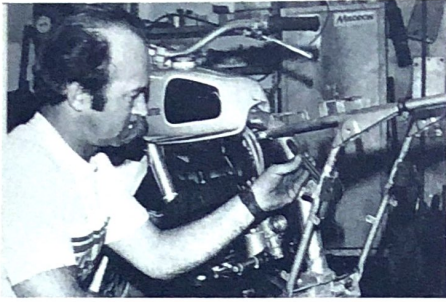
If you've got the bucks and want to go top-drawer, then he'll sell you a complete new GP frame replica made of 4130 chrome moly which will take any pre-GP Husky engine as if it were made for it. The frame comes with the new GP seat, fenders and splash guard. The trick boxed

swingarm is set up with gas Girlings and a special rear axle and spacers. The brake stay arm is offset and has a hyme joint for frictionless floating brake action. The swingarm bearings, one of the stock Husky weak points, are of the sealed ball bearing type to correct the weakness.

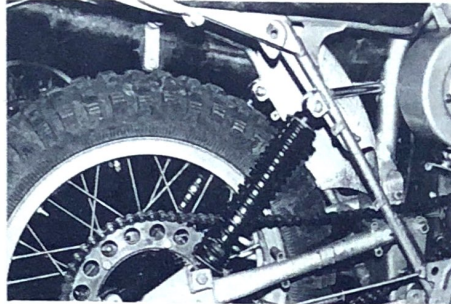
The new-style crown bearings and races (caged ball bearing) are incorporated also. The fork stops are strong and have rubber stoppers.

The GP pipe is not part of the kit, but for 50 bucks more you can have it. In Phil's opinion, the older-style stock pipe gives better torque and is

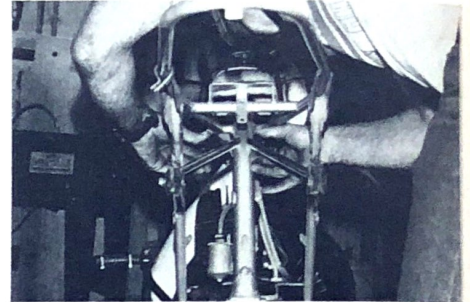
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Once the brackets are in position, crossbraces are added which attach to the rear downtubes and angle the stress accordingly.



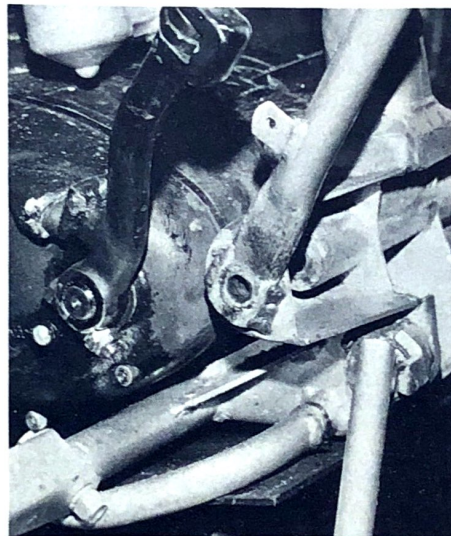
One of their first conversions shows that the crossbraces are more horizontal than our conversion, and although no problems developed it was felt the angle should be increased for added strength.



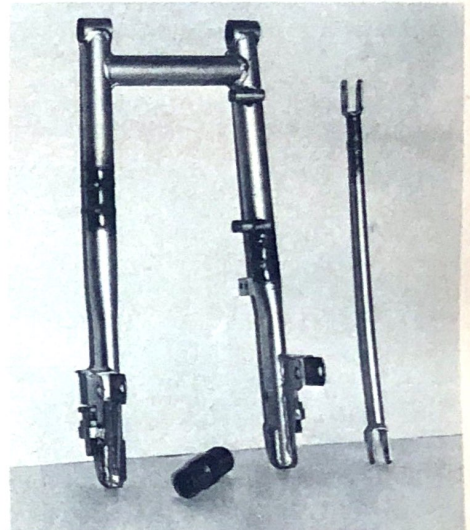
The braces should form a "V" just below the junction of the seat subframe.



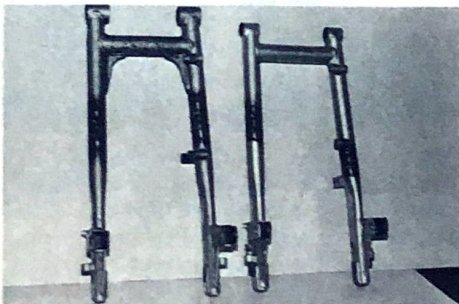
Once the crossbraces were welded, Phil made the two-piece '67 frame into a one-piece by welding the bolt-on sections together.



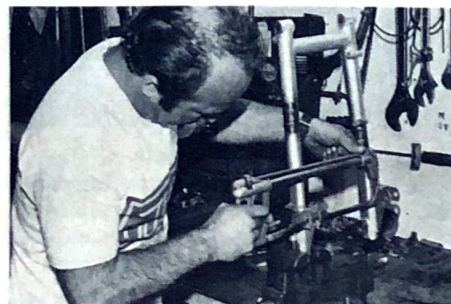
The swingarm bolt should be in position when tacking the subframe in order for everything to go back together properly.



You have to send your swingarm, brake stay arm and brake rod to Mission Hills for its modifications because the price is determined on an exchange basis. Notice that extension bushings are heavy-duty inserts and give added strength to the swingarm instead of weakening it.



On the left is a later Husky arm that's been modified, while on its right is the arm being used for the '67 Husky in our conversion.



Once the arm has been lengthened, using a jig for alignment, the shock mounts have to be lowered one inch and redrilled. In the case of the '67 two-piece frame arm it also is necessary to box it like the later arms, which come that way in the stock form.



Karl Krohn, of sidehack racing fame, touches up the final results with Lubritech's Honda Cloud Silver Motorcycle paint which matches the Husky color perfectly.



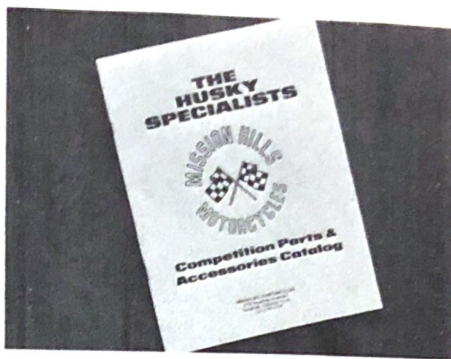
We had to put a slight ding in the pipe for clearance of the left crossbrace for the '67 model.

With everything bolted back in place and the addition of the gas Girlings you have over seven inches of travel at the rear. The shocks come with the long springs and use the medium damping. Check next month on what to do to your forks to match the rear's increased travel.

lighter, and besides, you won't have to cut the fins on the cylinder head to make it fit as you would for the GP pipe. The style and year of your engine will determine which of the aircraft alloy brackets will be needed for your conversion. There is a special bracket for the air cleaner assembly. How much is it? It's not cheap, but then nothing of quality is anymore. The whole conversion kit will cost you \$695. You supply the wheels, forks, engine, tank and anything else that wasn't mentioned above. The kit less gas Girlings is \$645.

If money is your problem, there is a cheaper course of action. Mission Hills Motorcycles has a laydown kit that can be used to modify your present pre-GP Husky. You can either purchase the kit and have it welded by your favorite dealer or welder or you can send the stripped frame to Mission Hills and they'll do it for you. I caution you to make sure a competent welder does the necessary work using either heliac or wire welding procedures. All Huskys have chrome moly frames.

This kit includes a modified swingarm (exchanged for yours), brake stay arm and brake rod (exchanged), brackets and braces for the top mounts, and will cost \$79.95 plus shipping. If you want the gas Girlings included, the total will be



For one buck Phil will send you his Husky goodie catalog.

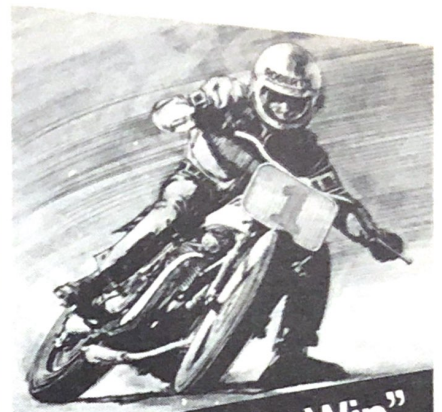


Check out this guy's swingarm position and Mickey Mouse laydown setup which we spied while out testing. He bottomed his engine in a hard turn and dug trenches all around the track. Not the hot setup.

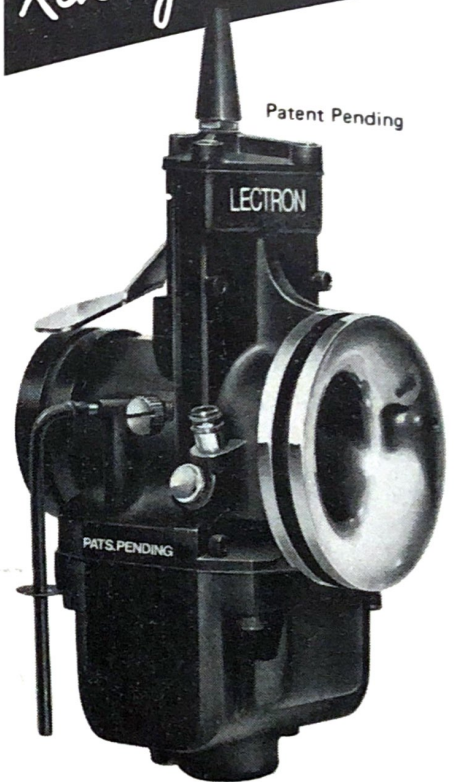
\$164.95 plus shipping. By sending your frame and swingarm they'll do the mods and return it for \$199.95, which includes the shocks also.

In order to show you the top kit procedure we used an immaculate 1967 250 Husky which utilized the old two-piece frame. The same procedure would apply with any pre-GP Husky with the only variations to be determined by the different swingarms used on the early models prior to 1969 up to the present models without the laydown suspension.

Another item to consider if you decide to update your suspension is the forks. The Mission Hills frame modifications will give you over seven inches of rear wheel travel, which will be more than any stock Husky front fork travel. Phil has several fork kits to update your front end, and we will show you these kits in the next issue. Some of the factory riders use part of Phil's kit and use the old-style stanchions which are stronger. Fork travel will be increased one inch for a total of seven and a half inches on the silver leg forks and eight inches on the black leg type utilizing the stock spring. More information can be had by writing Phil at his Mission Hills shop: Mission Hills Motorcycles, 8730 Sepulveda Blvd., Sepulveda, California 91343; (213) 785-4289. ▮



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