

Street-Lynx

By

Reilly MotorSports, Inc.

Installation Manual



1- Begin by removing your original rear suspension – disconnect your brake lines, E-brake cables, and remove the driveshaft. To prevent fire hazards and make room to work, drain and remove the gas tank, and remove the main chassis fuel lines from the car. The rear axle can be left sitting under the car, or remove it entirely if you need room to move around.

2- The first step is to install the upper crossbar into the car. The upper links and shocks will use this crossbar as an attachment point. Locate the forward hole on the frame rail that holds the rubber bumpstop for the axle. Clean this area thoroughly along with approx. 8 inches of the inside wall of the frame rail. Do this on both sides.



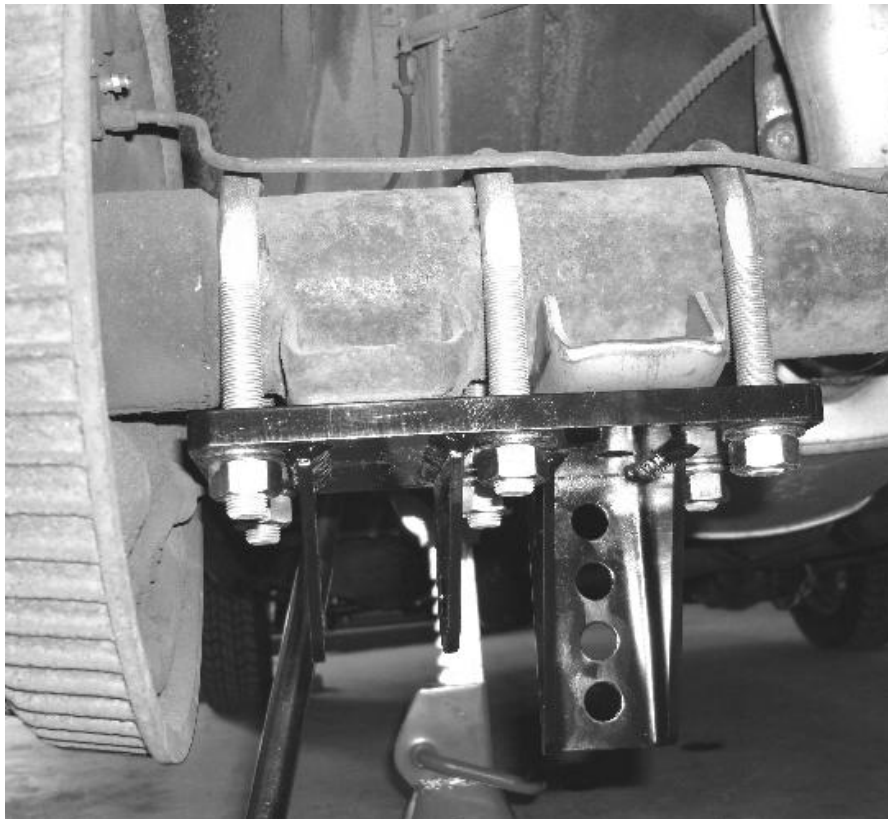
3- Hold the crossbar up between the frame rails so the tab on each side lines up with the forward hole from the bumpstop. The mounting plates and crossbar will be positioned ahead of this hole. Use the screw from the bumpstop to hold the bar in place. Frame rails can vary from car to car – one car may be a tight fit while others will fit loosely. There is little that can be done due to the variances in car bodies, and if there is a loose fit, it may be necessary to plate the frame rail to take up space prior to installing the bar. Although plating with 1/8" is rarely needed, it is possible. Once it's located with the bumpstop screws, tack the bar in place. Perfect fitment is not required, although you should take care to make sure you can weld all the way around the side plates. The 1" holes in the side plates should also be welded in for maximum strength.



- 4- Next assemble the lower links. The 1.125" spacers are used in the new front spring hanger, all other link ends use the tapered 1/2" long spacers. The recommended length of the lower links from eye to eye is 20.75". They can be adjusted as needed from that point. Attach the front hangers to the original mounting location. Or, if the system will be used in conjunction with an inboard spring relocation kit, the front hangers are not needed. The lower links will install directly into the inboard front mounts.



- 5- Attach the axle plates to the rear axle using the supplied u-bolts and extra set of axle seats. The plates are positioned so the shock mount faces the front and is inside of the lower link mounting tabs. The second axle seat does not need to be welded, but can be if desired. Tighten the 6 u-bolt nuts uniformly so the plate is flat and seated tightly against the axle seats. The original brake lines work, but will need to be bent slightly to clear the wider u-bolt layout.



- 6- Next, attach the billet aluminum lower shock mount to the mounting bracket on the axle plate using the 12-point bolts and lock nuts. The nuts are a tight fit in the back of the bracket, and the best way to tighten them is to first tighten one fully, and then let the second nut rest against the first one. The best position for the bracket is in the center two holes, although the ride height can be adjusted by using the upper or lower positions also. Install the shock mounting studs in the mounts and tighten fully. Be sure to use anti-seize compound on the stud to prevent galling the aluminum mounts. At this time, the lower links can also be attached to the axle plates using the supplied 5/8" bolts and 1/2" tapered spacers.

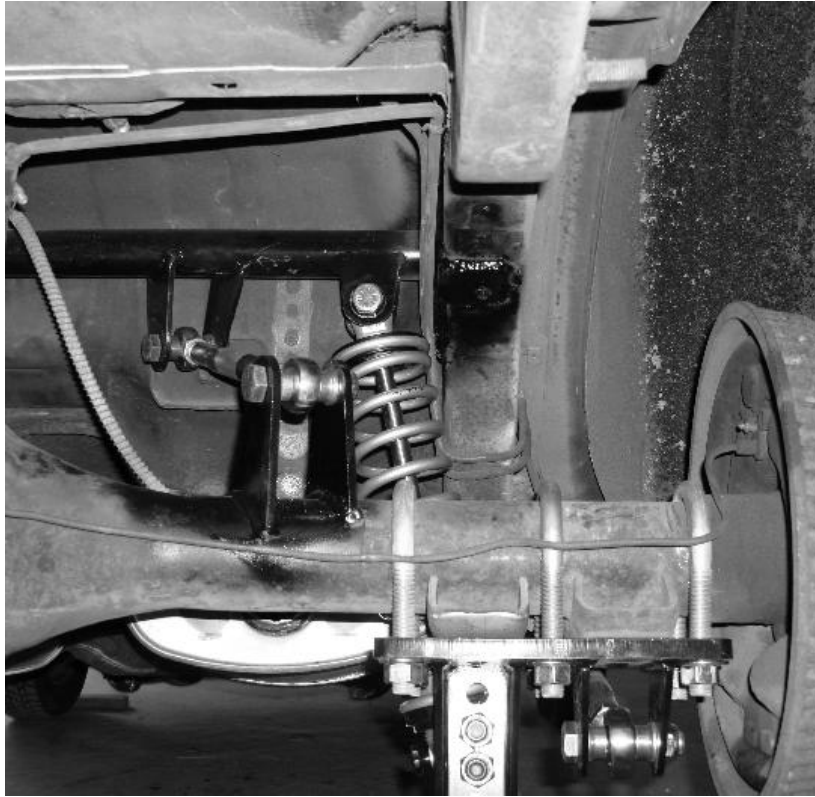


- 7- Now adjust the height of the rear axle to your desired ride height, which is typically 12-13" between the upper and lower shock mounts. This position is entirely up to you however, and is based completely on the "look" you want and the tire sizes you'll be using. At this time, you should set a rough pinion angle before locating the upper mounts. Hold an angle finder on the crank pulley and note the angle. Next put the angle finder on the front of the rear axle pinion and rotate the axle to duplicate the same angle. Setting the axle on 2 jackstands and using a floor jack to adjust the angle is the simplest method.

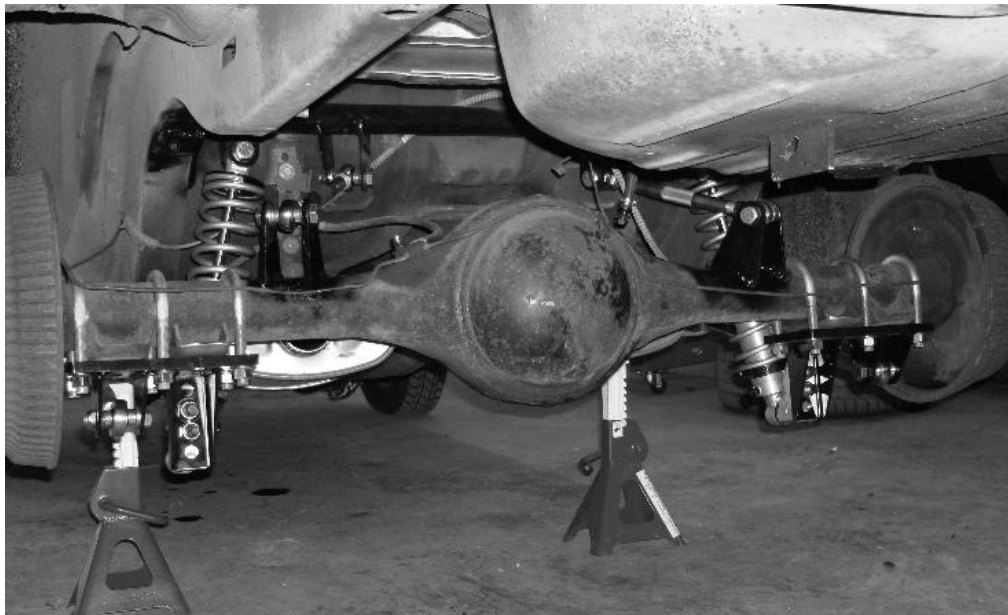
- 8- Now assemble the short upper links with the 5/8" rod ends, attach the weld-on tabs to one end, and install the other end into the upper crossbar. Don't forget to use the 1/2" tapered spacers. Take note that the weld-on axle tabs are different lengths – one long and one short for each side. Check to be sure they're standing straight up on the axle and not tilted to one side or the other. Also make sure the links are straight. If laid out properly, the width from link to link on the housing will be approx. 27". It is not necessary to make this perfect, but it should be close. If the kit is used with the lower links inboard, the upper tabs will fall between the first two u-bolts. When used normally, the tabs will end up just inside them as pictured. Tack the tabs in place on the axle, then lower it down to the ground for working room, and fully weld the tabs to the axle housing.



- 9- With all 4 links installed, you can now install the new shocks. It's easiest to put the shock on the lower stud and then slide it over into the upper mount. There are no spacers in the shock mounts. You can also paint the welded areas and put your fuel lines back into place at this time.



- 10- With the system fully installed, you can now reinstall your brake and fuel lines, fuel tank, and wheels.



Adjusting the suspension

Now that the system is fully installed, you can adjust the system. First, set your ride height to the desired position. This always comes first. If you need to change the position of the lower shock mounts, do this now.

When adjusting the springs on the shocks, try to make sure both springs are always close to the same length.

Next, check side to side location of the rear to make sure it is centered. If not, the rear can be moved sideways by lengthening one of the upper links and shortening the other. Next, check the fore/aft location to make sure the axle is square in the car. Measure from a point on the transmission crossmember, or from the door jambs on each side, and adjust the lower links as needed. Recheck the side to side location to verify it has not changed. Before tightening the jam nuts on the links, re-check the pinion angle, as it will probably change when making the other adjustments. Keep in mind, a 4-bar system will not rotate the axle like a leaf spring suspension, so the pinion angle should be kept to a minimum. If hard drag racing use is common for you, adjust it up 1 or 2 degrees. How much will depend on how hard the car launches.

Once your adjustments are set and the ride height is satisfactory, tighten all jam nuts.

As with all new springs and suspensions, a test drive should be taken to settle it all. Just a mile or two is all that's required, and then recheck all measurements to ensure the axle has not moved. Typically, you'll need to readjust your ride height after the springs have settled.

Note there are two mounting holes on the spring hangers. The lower hole is for most cars, street, handling, ect. The upper hole can be used at the drag strip to improve the anti-squat geometry, however the upper hole will also increase roll-steer and will not behave well on the street.

It is known that the TTI tailpipes will not fit this system, although there is room for custom tailpipes to be routed out to the back.

Because the lower links are narrower than the factory leaf springs, they allow you to take full advantage of the factory wheel opening. With a 17 X 8 wheel with 5.72" of backspace, it's possible to fit a 275/50/17 into the factory Dart wheel wells. Other sizes are possible, but were not tested.



Disclaimer

This product is intended for off-road use only! Because the Street-Lynx system is typically subjected to uses that far exceed it's mechanical limits, there are no warranties expressed or implied. Reilly MotorSports, Inc. cannot control how this product is installed or used. By purchasing this product, you assume all risks associated with its use and agree to having the proper skills for it's installation. Reilly MotorSports Inc. and its suppliers will not be held responsible, liable or accountable for any injury, damage, loss, penalties, or fines that occur from using this product in any manner.