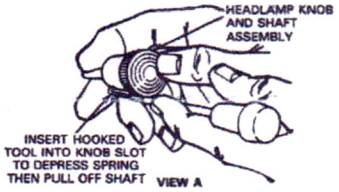
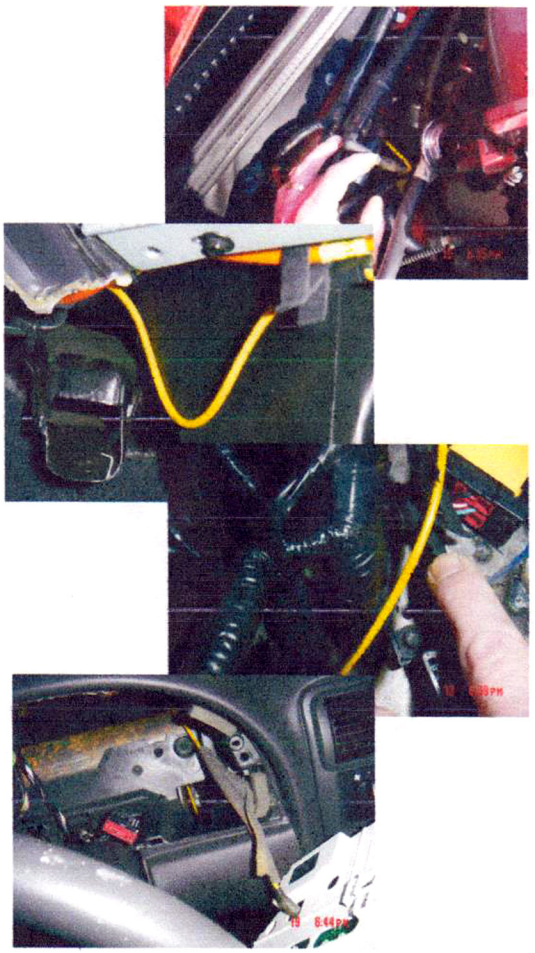
Plan on about 1-2 hours or so for this project. There are a few tools you will need. I used a trim tool (pictured), an aftermarket boost gauge and a controllable air source (also pictured on pg. 2). Don't rush it or force anything. Just like any job you do on your car be patient and keep your cool. I've probably gotten a bit wordy with my instructions but I wanted to make sure everything was covered and explained. Are you ready to get started? Let's do it!
There are many helpful hints and suggestions from Boost overlay owners in the SVTperformance.com web site. Do a search for boost overlay. Lots of good tips there.

First you'll need to remove your stock gauge cluster. The headlight switch can be removed by following the illustration to the right. This is pretty standard Ford switch removal. I fashioned a hook tool from a piece of wire. The gauge cluster bezel is held in place by 2 torx screws in the upper part and 2 side and 2 lower spring clips. To get the gauge bezel to come off you must slide something between it and the dash panel. The trim tool that I have pictured is very useful in this. This is a common part you can find in most automotive stores and I think anyone who works on cars should have one in their tool box. Then, remove the 4 torx screws, the same size as the first 2, that hold the cluster in place.

Headlight switch removal

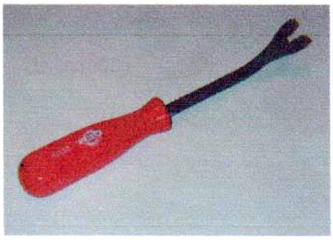


It was difficult to wrestle the gauge cluster towards me far enough to reach behind and disconnect the 2 electrical connections and the one boost line that attached to the gauge. The electrical connections have some built in length to do this but the boost gauge does not. To obtain the slack in the boost line you must now move under hood on the passenger side near the fire wall where the boost line (yellow) comes out of the fire wall and T's into a red one. There is about 3-4 inches of slack between the T and the fire wall that can be pulled back into the area under the glove box. See photo at right. Next go to the drivers side floorboard: the boost line comes down from under the dash, wraps around and then is clipped to the wiring harness with a plastic clip and black electrical tape. The line is taped to the clip and then it is clipped to the harness. There is a large electrical connector plugged in near it. Unplug it to get your hand back in there and cut the tape with some scissors freeing the line from the clip. (you will need 2 hands to get the clip undone... ain't happening) There is another one a little farther in, cut the tape there. Go to the passenger side under the glove box and you will see the yellow boost line clipped to the harness in two places there, cut the tape there. In the area over the hump and behind there is 3 or 4 inches of slack they have stashed in there. Gently tug the end going up towards the fire wall and you will pull in about 3 more inches of slack. Go back to the drivers side and tug is across and then remove your instrument cluster while feeding it up. Make sure it doesn't snag, any resistance.... stop and investigate. You don't want to cut it or damage it. By performing this procedure you will have freed up at least 8 inches of boost line. Enough to lay the cluster on the dash.
When you have installed the overlay and are ready to reinstall gently tug it back down while putting the cluster back in. A few swatches of electrical tape putting it back alongside the wiring harness and pull 3 inches or so back out of the fire wall into the engine bay and your set.



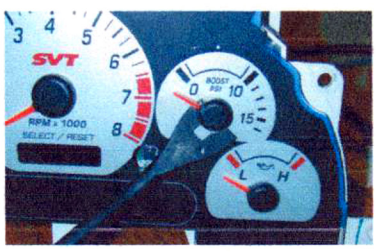
creating more boost line slack

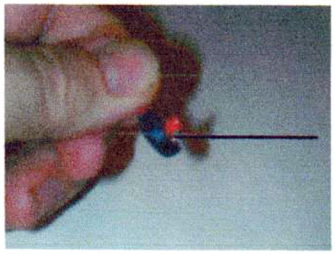
Place the cluster somewhere that it will be easy to work on. Remove the torx screws holding the clear cluster cover. With the cover removed you have direct access to the needle. Again the trim tool pictured was very valuable. However if you don't have one a common table fork works as well. Because the way its shaped it allowed me to slide it under the needle and keep even pressure on it while popping it off the shaft. To protect my gauge face from a possible scratch I covered the end of the trim tool with a layer of masking tape. I took it off for the photo here so you could better see how it is shaped. Its just a press fit but the first time it comes off it can be a little stubborn. After the needle is removed, turn it over and you'll see the little tab that restricts the needles movement. This tab must be removed. This can be done a couple of ways but I just took a pair of snips and cut it off. One IMPORTANT thing to remember is to cut it off as flush to it's base as possible. It must not come into contact with the slot in the gauge face hole that restricts the needles movement.



trim tool

needle removal

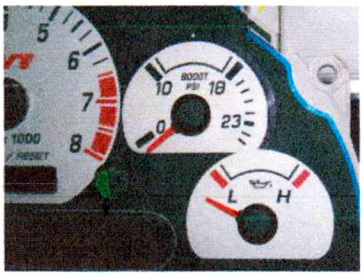




trimming restrictor pin

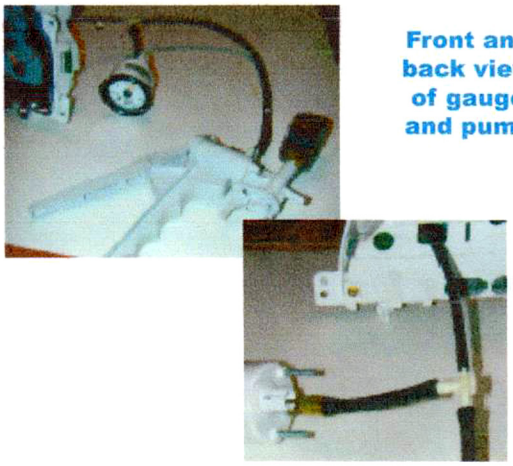
gauge cluster removed

Ok, now we're ready to install the overlay. Lay the gauge cluster in front of you on your bench or sit it on a table. Take the transfer sheet that the overlay is on and peel off the overlay. Hold it gently by the edges and be careful not the get finger prints on the adhesive side. To make it easier to place the overlay on the gauge face I placed it on the tip of an x-ato knife and lowered it into place. There are 3 points of reference you need to be looking at as you slowly place the overlay on the gauge surface. One is the little metal shaft that the needle slides on. This must be pretty close to being centered in the hole in the overlay when its applied. One other is the hash mark at the 10 and the horizontal line that converts the 10 to an 18. The hash mark on the overlay is slightly smaller than the hash mark on the gauge face. The other is the number 1 which when placed next to the 0 on the gauge face converts the 0 to a 10. Lay the overlay gently on the gauge as you align these 3 reference points and you will have it placed properly. The hash mark on the overlay is shorter than the one on the stock gauge face. You will want the bottom edge of the overlay hash mark to lay directly on the bottom edge of the stock gauge face hash mark. I did this on the first try. You can too if you do it slow and steady. Be careful not to press down and smooth out the overlay till you are certain you have it placed properly. You can reposition it by pulling up gently if you are careful and don't hit it on the first try. You'll notice that the overlay goes past the silver area of the gauge and onto the black aprox. 1/8" and is pretty even all around. Don't worry if it covers a little of the tach face, the cluster cover will hide it.



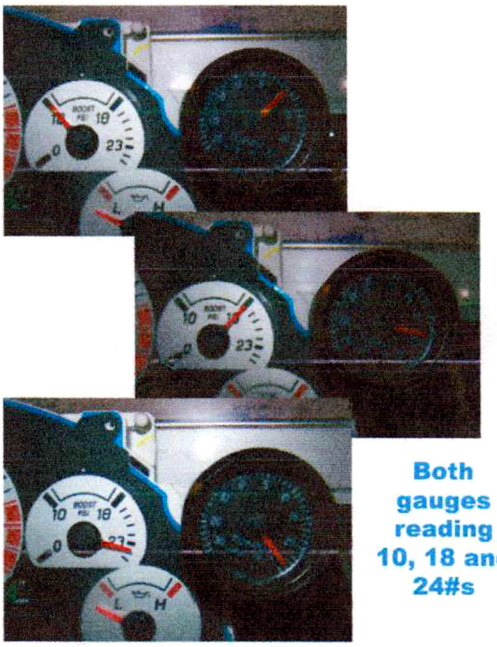
High Boost Overlay installed

Now we're ready to calibrate. You'll need to borrow an accurate aftermarket boost gauge for this. It helps to have one that is the same approximate diameter as the stock gauge. Attach a hose to the stock gauge and to the T fitting. T fittings can be purchased at most automotive stores. Then attach a hose from the T to the aftermarket gauge. Then attach a hose from the last fitting on the T to a controlled source of air pressure.
When you're done it should look like the pictures. I chose a hand held vacum/pressure tester for this which I believe gives you the most control, but something else with a controlled air supply would work. As a starting point place the needle back on the little metal shaft so that it reads aprox.
3/16ths inch below the new zero hash mark. This initial placement will vary somewhat but should get you in the ball park. Place it on the shaft just firmly enough so it won't come off but gently enough so you can remove it easily. One way to tell if the needle is on correctly is this. After you have put it on the shaft take your finger tip and gently move the needle clockwise past the 12 o'clock position. You should feel a slight resistance as the needle swings farther to the right. Remove your finger and let it go it should swing back to where it started. Make sure you have no air leeks in your connections. An air leak will cause an inaccurate reading.



Front and back view of gauge and pump

When you get everything hooked up its time to begin to introduce air onto the line. You'll notice both gauges react. As the air pressure increases keep an eye on both gauges. As the aftermarket gauge reaches 10 the stock gauge should also be touching the 10 hash mark. As you continue to increase the boost you will se the needle cross over the 18 and eventually the 3 and so on. Unless you were lucky enough to have placed the needle on earlier in the exact correct position you will need to remove the needle and make the necessary adjustments to have both gauges reading the same. Notice the orientation of the stock needle to the needle in the aftermarket gauge as the air pressure is applied (if it is a little low or a little high). Then release the air pressure and let both gauges bottom out. Then gently remove the needle with your trim tool and clock it the same distance higher or lower that it was off. It may take a few attempts to zero in on the exact placement of the needle. I used a piece of masking tape on the gauge face by the zero and scribed a pen mark on the tape to note where the needle bottomed out and used this as a reference point. When it is set properly it will register the exact same on both gauges. When you have both gauges reading the same to your satisfaction press the needle firmly on the post so it won't pop off and you're done.



Both gauges reading 10, 18 and 24#s

Reinstallation is pretty much the reverse of removal. Gently tug the boost line back down while putting the cluster back in. A few swatches of electrical tape putting it back alongside the wiring harness and pull 3 inches or so back out of the fire wall into the engine bay and your set. Be sure you don't plug or kink the hose when you replace the cluster back in your dash. Don't forget to plug in the two electrical plugs in the back of the cluster. Enjoy!