TWO GUYS FROM TEXAS / PART 7 ã
By Bruce Fullerton and Robert Mace

15,000 words later, please allow Bruce to wipe some egg off his face, no pun intended. In Part 6, he gave out some incredibly bad advice in reference to beefing up the door piston. The tip involved placing a cut out from a 2x4 in the piston to help compress the spring with the intent of holding the door open. It doesn't work folks. It's way too much of a shim (1 ¾") and the spring compresses before the door closes. Bruce found out the hard way. Since then, a gas strut from Isettas-R-Us has been installed that works famously!

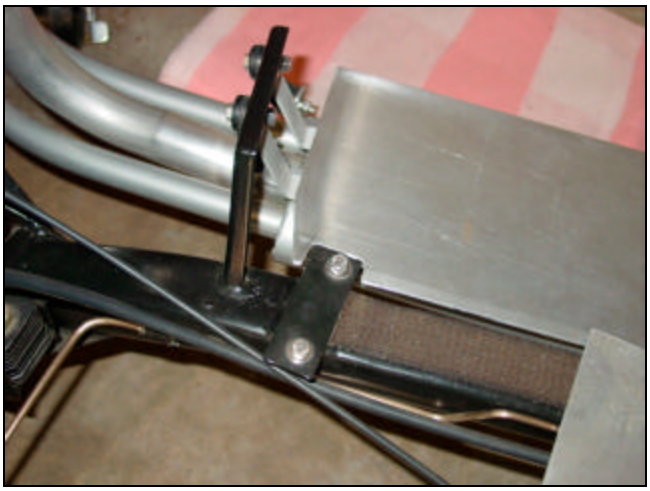
One real plus for the gas strut is that you just drop it in and screw the piston halves back together. Forget that three-ring-circus involving angle iron, a helper, flying shrapnel, etc. from a reassembly standpoint. A truly beautiful solution to an old Isetta problem for roughly $60.00. BF apologizes if this caused anyone a problem.

OK, this time we'll cover putting the body back on the chassis, door alignment, installation of the rear bumper, mirrors, trim, grab bar and headlights buckets/rings.

Before lifting that body back on the frame, double check the following:

- **Are all nuts and bolts tight? Triple-check those drive couplings!**
- **Are cotter pins installed in all bolts that require them?**
- **Make sure that all of your brake line fittings are tight and dry.**
- **Be sure and secure the front brake lines away from the frame so the front fender wells don't bend them when lowered into place.**
- **Make sure you take that engine cover off and put it in a safe place.**
- **Have your trimmed front rubber body/frame seal and adhesive ready to go.**
- **Remove any dead weight from the inside of your car like the seat, spare tire, battery, girlfriend, etc. Removal of the door alone is a huge help.**
- **Put a grease rag behind/under the steering worm gear so it's standing up as straight as possible. It needs to pass through that hole in the floorboard when the body comes down.**
- **Install your rear wiring harness and gas tank/fuel lever/gas line assembly and make sure it's good and tight. Ditto for your shift tube assembly. While you're at it, fasten both rear lateral shift rods to the transmission.**
- **Glue one of your new steering housing gaskets to the top of the frame's steering gear box so you have a seal in place between that part of the frame and bottom of the floorboard.**
- **Install that funky rubber heater hose on the engine cooling shroud. Attach the external heater can with a hose clamp just tight enough to hold it on. You'll need to align that can with the three mounting holes in the firewall later. Make sure the slotted screw on the hose clamp is facing out towards the engine.**
- **Install the rubber air intake hose on the rear of the air cleaner canister. Be sure to have the slotted screw in your hose clamp facing down and to the right (passenger side). This allows for a bit more clearance for your fuel tap.**

By now, you should have installed your frame webbing and rubber pads on top of the frame. Make sure that your rubber pads are 1/16" thick and your webbing 1/8" thick so everything ends up on the same plane and you don't warp your floor pan when you bolt it down. The body mounting brackets that the get the rubber pads are raised about 1/16" above the frame. That's why the difference in thickness between the webbing and the rubber pads.

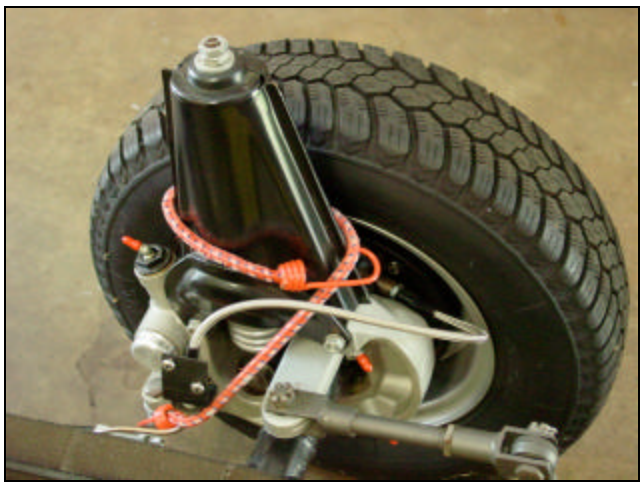


Webbing on driver's side frame rail butts up to the left rear body mount. 1/16" inch rubber pad on body mount is flush and level with 1/8" frame webbing.

One source for webbing is a vintage Chevy outfit, The Filling Station at www.fillingstation.com or (800) 841-6622 . You'll be asking for their part number FS-702. That's 1 ½" x 1/8" webbing at $2.00 a foot. You'll need about fourteen feet. This stuff has a sort of tarry, oily finish and is very tough. Cut to size with a pair of utility scissors, spray one side with an adhesive such as 3M Super 77 Adhesive and lay it down in

place. Super 77 tacks up very fast so be ready. Use masking tape every six or eight inches to hold the webbing place overnight.

Another source is Hampton Coach at www.hamptoncoach.com or (888) 388-8726. You'll want their part number B-5000-AS which is also 1 ½" x 1/8" but has an adhesive backing already built-in. Just peel and stick. A 20' roll goes for $22.50, the better bargain of the two.



Frame is double-checked and ready for the cows to come home. Bungee cord secures brake line/hose away from fender well until the body is back on. Sure hope we didn't miss anything!

If you have your front and back glass installed, you now know that this isn't the same little pup that you and your partners-in-crime could bench press back when. Have four people on hand for this operation and *play it safe*. Having a fifth for a "spotter" ain't a bad idea either. Having made sure that the engine cover is off the car, just line it up over the frame, having the "spotter/right rear lifter" pay particular attention to that narrow body panel to the rear of the engine cover and make sure it doesn't snag on anything. Take it slowly.

Once on the frame, minor adjustments are a snap when it comes to lining the floorboard holes up with the threaded frame mounting holes. You can put a 6m bolt in the outside threads of each rear body-mounting bracket, threads facing up, to act as a target. It also keeps those two rear rubber pads from doing the watusi and getting off-center when you're adjusting the body on the frame. Just unscrew the bolts when you're done and put the normal bolts in from the top.

Now, lift the front of the body up just slightly and slip your front rubber gasket in, lower the body down on to it and make sure you notched it correctly to fit around your steering housing/pedal assembly. Remove it and use a little adhesive on the bottom side and put back in place. Now you can bolt the body down.

Go ahead and fasten the front brake line brackets to the inner wheel well of your car, run your hand brake, speedo, heater and choke cables into the cockpit. You can also put that steering housing/pedal assembly back on and reconnect all linkage under the front of the car.

Now install the front bumper along with the BMW badge, Isetta 300 script and stainless steel grilles. Next comes the air cowling with flap, new rubber flap seal and fastening hardware followed by a freshly upholstered door panel, inside air vent, door latch, striker plate and re-chromed inside and outside door handles and hinges. The door hinges were fitted with stainless steel pins and e-clips from Isettas-R-Us to replace the corroded originals. Put a dab of waterproof bearing grease on those pins before you pooch 'em in.

The door originally closed like a commercial refrigerator, although most of the rubber seal was shot or gone. With a new seal installed, you can bet that the original shimming scheme may not be right anymore. The shims were something you made a note of when the door/hinges came apart, right? Bruce's door latch scraped against the striker plate when closing the door indicating that the door was too far to the right. Sure enough, the body shop had placed one of the thick aluminum shims between the door and door hinge at the top. Removing it pulled the door just that much back to the left. Finally, the gents at the body shop hadn't tightened the hinge nuts all the way down. Once that was done … el clicko!

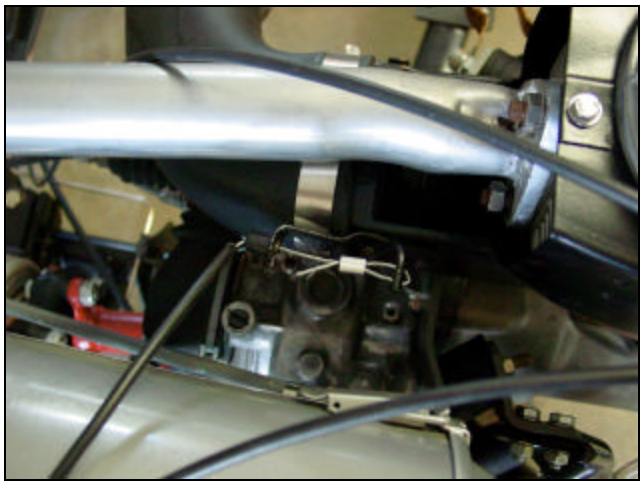
New bumper, nerfs, taillight rings, reflectors and Euro center brake light kit ready to rock.

The rear bumper is pretty straightforward. The new unit was supplied by John Wetzel and also came with the nerf bars, trim washers and rubber standoffs. These guys are beautiful reproductions! As for the trim between the bumper and body, you can order that from suppliers or, if you want something besides

silver/gray, just have your upholstery shop whip some out for you and trim to fit, just like you'll have to do with the suppliers' trim. It's nothing more than smooth, round plastic bead, not unlike heavy duty monofilament fishing line. The material of your choice is wrapped around it and a tight seam is sewed up against that bead. Pretty simple! Black trim, complete with die-cut bolt holes ran a whopping $5.00 and match the black external rubber on the car perfectly. Use a little glue on the top of your trim to secure it against the bottom of that lip it rests against.

Stainless steel nuts and bolts were used due to the potential for moisture accumulation. Finally, if you're concerned about the inside of the chrome nerf trim washers scratching your paint, you can grab a pair of 2 ½" neoprene rubber washers at the hardware store and install them on the back side of the washers for a little buffer zone between the paint and rings although the original setup was metal-to-metal. These rubber washers won't show when things are tightened up, by the way.

Prior to putting the body back on the chassis, the heater cable was fastened to the flap lever on the cooling shroud and hooked up the shifter tube in order to get the length of the cable right. A cable ferrule was crimped on to secure the cable at the heater end. We would imagine that this would be a job for a contortionist after the body is mounted. Although the ferrule is accessible from the right rear side of the engine compartment, it's a tight fit. You can install the heater can on the firewall once you have the body back on.



Cable ferrule can be seen here in center of pic securing heater flap cable. Crimp this jasper down before you put the body on. It's hard to reach after-the-fact.

Mirrors are a snap. Bruce had a passenger side mirror added to the lineup along with a new driver's side and inside mirror. These new units come with nut and rubber washer and are ready to pop on. For some bizarre reason, '66 Chevelle rear view mirrors screwed into the headlight buckets just don't seem to cut it anymore.

For the inside mirror, make sure you don't use sheet metal screws that are too long and poke a hole in the door. That would be a bad day at the office.

Another addition was a grab bar. The bottom of the handle should be even with the bottom passenger side window sill. Also, make sure you don't mount it too far forward where it interferes with the door closing. Just drill two 13/64th holes, tap them for 6m x 1m threads and attach your bar with two countersunk metric machine screws. A bit of Loc-Tite might not hurt either should Hulk Hogan ever hitch a ride with you. Makes a big difference when deplaning.

It might be a good idea to mention that the following is work-in-progress as we speak. We had a deadline to meet and didn't get the side windows completely installed so here's what we did up to this point.

As mentioned in Part 6 of TGFT, the windshield and rear glass were professionally installed. The side glass was one of the last components installed, mainly to cut down on weight in respect to reinstalling the body, not to mention the 100+ degree heat in the garage. Gotta have that fan doing it's thing! New rear seals were installed using the originals as a reference point to measure correct length and angle of cut where the two pieces meet at the rear. Drip holes were cut with an Exacto knife to allow for drainage. For whatever it's worth, the originals looked like someone had done this job at the factory with either their pocket knife or had their German Shepard or Dachshund gnaw them out. Not particularly pretty but who sees it anyhow? The seals fit very snuggly and were only glued at that rear seam. You'll find that the rear side glass is a tight fit so there's no need for pop rivets or anything like that. Neither one of our Isettas had rivets holding the seal in when we dismantled them.

This might be a good place to talk about the curved aluminum side window trim. Bruce had worked his over with Semichrome polish, fine steel wool, wet 1000/1500/2000 grit sandpaper and plenty of elbow grease. They were in fairly good shape to begin with and looked that much the better but something just wasn't right. After looking under "Metal Finishing" in the Yellow Pages, Mike's Polishing and Grinding near Lake Travis, Texas surfaced. Sure enough, Mike Richardson was an old rodder from way back and did a fair amount of automotive trim polishing. He said to bring 'em out and that both trim pieces

would look like they had just come back from the chrome shop when he got through with them. Wow! No kidding.

Mike said that it appeared that BMW used a unique type of anodizing to preserve their appearance and that it had to be buffed off. Due to the incredible luster of the finished product, he also commented that as best he could tell they were pure aluminum, not alloy, and that it was rare to see that quality of aluminum.

Look around your area for someone who is in this business, even someone who makes custom jewelry and/or has industrial-strength polishing wheels. You won't believe the difference. Mike also did the window latches, turn signal and high/low beam housings. The other mind-blower was the aluminum wiper motor housing. You flat have to see it to believe the kind of shine this thing will produce when left in proper hands. Oh yeah, forgot to mention the gleam of the cast aluminum steering wheel hub. No way this baby's getting' painted! And yes, Robert's stuff is out there as we speak getting a ditto treatment.

One last tip we were given was to go straight to the auto parts store and buy a 7 oz tub of Blue Magic Polish, about $4.00. It's a paste and is not abrasive like many metal cleaners. Mike said that it was flat-out the best he'd seen for periodic maintenance. Whatever you do, DON'T stick your nose in this stuff! It's got ammonia in it and it'll put you back on the front row of a Jimi Hendrix / Chocolate Watchband concert in a New York minute.

Before we wrap this installment up, please note that the window install was not complete when this article was due at Ernie's Place. We offer the following guidelines for your reference and will follow up the completion of the process in Part 8.

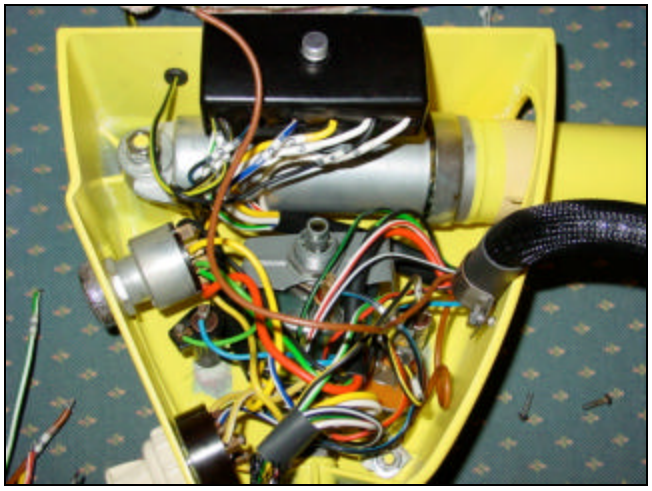
The new polished window trim pieces were riveted partially in place (the three rear rivets) so they could be pulled slightly outward in the front when time came to put the "slider" in. Bottom front felt comes next, fit the window into the outer channel, push it to the rear and then feed the top felt in over the top of the window. Be sure to pop rivet that top piece just where the roofline starts to slope forward. Look and you'll see the hole where the original was.

The locking strips go something like this: The inner black strips extend from the front of the rear side windows forward to the slope of the roof and keep the rear windows in place. This black lock strip is on the bottom only and around 19" long on each side. The silver (or chrome, if you prefer) strips go along the bottom and top of the rear rubber seals. They not only keep that rear window clamped in but the front ends of each strip act as a stop for your sliding window. You'll need about 40"-42" for each side. The top, inside felt track will be empty when you're done. Mr. Jensen goes into a bit more detail in his "Isetta Restoration" book on pages 145 and 146 but you've probably already memorized that chapter too. A little silicone spray in the outer channel might improve slideability. Is that a word? It is now.

To wrap up this action-packed issue, the body shop finally got moving on Robert's car. As we write, it's getting a few fresh coats of 2002 Beetle Cyber Green. Given the original deplorable condition of his ride, it's gonna be a knockout. It's a good thing because he's been a lot more agreeable to be around lately, seems to have lost all interest in handguns and quit reading those cool George Hayduke revenge books.

Wait, what's this? It's the Bubbamobile!
... painted, loaded up and ready for re-entry. Mike Shambarger of Classic Auto Works ties 'er down while the Bubbameister oversees operations.

OK, OK, OK! We've been blabbing about the electrical system and haven't produced, have we? Next time, Part 8 will focus on getting the nervous system back in our hot rods, talk about wiring for that Euro center rear light upgrade and all things 12 volt, negative ground. We'll report on mistakes we've made, things we didn't think about (we'll just blame it on John Jensen for not putting it in The Book), fine tuning and the 2002 National Meet in Duncanville, Texas.



Next issue: The instrument panel, or "How to stuff ten pounds into a five pound sack". Homemade Mexican handcuffs will also be on the table for discussion.

Gotta go. The Prize Patrol just pulled up out front!
… BF & RM

BF: brucef@austin.rr.com
RM: bubba@whirlingpool.com
Web: **www.whirlingpool.com/isetta/isetta.htm**