



Project: 1974 Alfa Romeo      Week: 4/10/17 - 04/14/17      Labor Log #: 01

Day	Labor	Hours
4/12	Began stripping and taking inventory of crash damage - Removed the hood - Removed rear trim and lighting and continued to bring the body down to bare workable sheet metal for repair	8
4/13	Finished fully strip interior and exterior of the vehicle of components including removal of all rear interior panels and vents, roof glass, hinges, trim, wiring, front end lighting, horns and bumpers; removal of fuel tank and associated parts, removal of trunk lining, wiring, and all trunk mounted hardware and parts - labeled and bagged all the parts. made a list of parts to be replaced and referenced provided catalog for proper terminology - Went through and began compiling part numbers per customer request.	16
4/14	Taped off windows and removed both seats - Assessed the damage to the outside rear of the vehicle now that all the interior panels have been removed - Attempted to remove tar board from inside but heat will need to be applied to remove - The driver's side taillight housing was riveted in place just as the factory had intended, while the passenger side was welded on the bottom edge where a rust patch was welded over top of the damage - The edge was ground down on the patch to preserve the tail pan - a wire wheel was used to expose spot weld locations on tail light panel. Began drilling out spot welds to break the panel free for removal starting on with the tail pan and drivers rear corner began separating the panels	5
<b>Total Hours:</b>		<b>29</b>



Project: 1974 Alfa Romeo Week: 4/17/17 - 04/21/17 Labor Log #: 02

Day	Labor	Hours
4/17	Applied heat to the tar board in the trunk to remove with a scraper - Performed the same action on removed lower rear quarter before removing the paint as well - Finished cleaning the panel with a wire wheel - Media blasted both tail light housings - Inspected front lighting wiring and trunk wiring to determine what if anything requires repair or replacement - Installed new washers and nuts on the air cleaner cover as they were missing- Continued to drill out spot welds in the rear to finish removal of the lower valance and the lower drivers side rear quarter - Began pulling the damaged area along the top out into position starting with the center damage and working over to larger damage on the passenger side - Made an attachment for slide hammer to get behind the damage and continued to work the rear of the body using the slide hammer and then smoothing the panel	12.5
4/18	Used a wire wheel to finish the trunk floor down to bare metal - Removed the trim in front of the rear wheels, both sides - Began using heat and a wire wheel to clean the driver rear wheel well - Continued to disassemble the rear panels at the spot welds - Removing the inner brace along the rear to clear room to finish cleaning the inside of the rear hatch area - Began drilling out the spot welds to remove the spare tire well - With the welds broke loose a spreader bar was set up to push off the strut tops to help push the rear of the car back to gain access to the folded over spot welds	9
4/19	Scrape off tar and seam sealer from rear valance piece - Sandblast spare tire well, one gas tank brace, and one side of rear valance - Blow off all 3 pieces and spray in weldable primer - Continued cleaning up the driver side wheel well with heat to remove the tar undercoating - Used a wire wheel and a black rapid strip disc to clean to bare metal - Finished cleaning all of the spot welds in the spare tire panel to prep for removal - Ground down the outer 'stitch' welds at one seam on the outside of the wheel well - Removed the spare tire panel from the car cleaned it with heat to remove the undercoating - Finished most of the entire panel down to bare metal with a wire wheel and a black striping disc - Cleaned up the passenger side wheel to bare metal with heat and a wire wheel to expose spot welds to be drilled out - Finished drilling out the spot welds for the spare tire well - Used the seam buster to hammer the remaining seams loose and removed the spare tire well pressing it out from bottom of the car - Once removed pulled the rear tail light panel back to expose more spot welds - Drilled out spot welds and removed the rear tail light panel - Drilled out the spot welds for the inside fuel tank brace and removed the brace	19
4/20	Media blasted the rear valance and the rear brace - Began working the damage of the spare tire well - Starting from the outside of the damage and working into the center of impact to unfold the damage - Once it was roughed back into shape the damaged areas were planished smooth - The wheel well was stretched and oblong due to the impact - A 27 inch diameter circle was drawn out as reference and the base of the wheel well was clamped down to align with the circle - Once evenly locked in place the stretched areas where worked with a shrinking disc along with hammer and dollie - The wheel well was	11.5



	then planished smooth for a finish - Minor planishing still needs to be done but the bulk of the damage is repaired and the part is ready to be used as my reference for pulling the body back into shape	
4/21	Brushed weldable primer onto 3 blasted pieces - Cleaned up the spot welds along inner wheel well and along the wheel well inside the trunk area - Brushed the media blasted pieces with weldable primer in preparation for metal work - Begin pattern work on rear quarter by taping the entire piece and laying down the grid lines - Began shrinking and stretching strips of metal to form 'arrangement' guides - Removed the second gas tank brace at the spot welds - Finished drilling out all of the spot welds to the forward most point of damage inside the trunk - Marked out with tape a 3/4" space from a body brace and cut a straight line to cut the full trunk out of the car - Removed damaged trunk for the car.	14.75
<b>Total Hours:</b>		<b>66.75</b>



Project: 1974 Alfa Romeo      Week: 4/24/17 - 04/29/17      Labor Log #: 03

Day	Labor	Hours
4/24	Used heat to remove the undercoating from the trunk floor - Media blasted and used a wire wheel to remove the rest before coating in weldable primer - Media blasted and coated rear fender panel, one of the rear braces and gas tank strap - Disconnected HVAC controls and removed center console top plate - Removed center console - Removed instrument upper cover and wiring - Heated up and scrape off bulk of undercoating on inside of trunk area - Wire wheel sections clean.	13
4/25	Removed dash - Drilled out spot welds, after center punching for accuracy, from trunk floor panel to piece out - Grind down welds along top of battery tray. Completed removal of dash. Fully disassembled, labeled and bagged instrument parts, wiring and hardware.	6
4/26	Mask off around back half and nose of vehicle to protect from chemicals - Brush painted stripper onto exposed paint on vehicle and scraped off paint residue - repeated steps 2 more times - Stripper would not peel up next material layer even after scuffing with 40 grit to try and create bite - Wiped down vehicle with water to neutralize chemicals - Used 80 grit on a DA to sand away dried stripper and 3/4 of body fillers/primers - Sanded off the remaining materials with wire wheels - *Note - bottom section of rear quarter next to driver and possibly passenger door had a large amount of body filler covering bad metal work, Shaun photographed and sent to customer - Grind down welds on each side of the floor trunk panel to remove siding - Drilled out spot welds throughout - Pieced out entire panel until just the floor remains for metal work - Power hammered dollies to straighten and shape - Attached the spare tire well back onto the trunk floor panel to check for shape - Coated rear of car with chemical stripper and scraped off all chemicals and loose paint - Used 80 sanding discs with DA to remove all leftover paint until only one layer remains. Used wire wheel to remove remaining layer.	19.5
4/27	Striped down the rear end to bare metal - Used the wire wheel to strip the nose and completely clean off. Finish stripping rear of vehicle with wire wheels. Sand dried stripper and 3/4 of body fillers off front nose of vehicle with 80 grit on a DA. Wire wheel	8.5

	the rest of body fillers off front nose of vehicle. Blow off entire vehicle and scrub down with wd-40. Wipe off excess wd-40 and unmask entire vehicle	
4/29	Continued assemble of the trunk panel & removed panels – starting with the right-side fuel tank brace - Using the Pullmax, made a set of hammer dies to work inside of the brace to smooth and worked the edges of the Brace in the vise – Installed the rear brace, front brace & gas tank brace to the trunk panel using cleco's to check the finish	3
<b>Total Hours:</b>		<b>50</b>



**Project:** 1974 Alfa Romeo      **Week:** 5/1/17 to 5/13/17      **Labor Log #:** 04

Day	Labor	Hours
05/02	Finished straightening the finial fuel tank brace – nibbed the old spot welds clean and used clecos to clamp the panel in place – straightened the outside support panel for the passenger side that goes from the trunk floor to the wheel well – clamped in place and check fit against the other panels – finished straightening the rear cross brace and clamped in place – began aligning with the spare tire well and worked the panels as need to make fit	2.0
05/03	With the entire assemble of panels clamped together continued to remove and working panels as need to better fit to the car – the forward most cross brace had a crease that was thought to be original but was from the accident – the panel was removed, worked smooth and re-clamped in place – the left side gas tank brace was causing the floor to dip slightly, it was removed, adjusted and re-clamped in place	2.5
05/05	Began welding the wheel well in place working from the back corner forward – to reweld the original drilled out spot welds the process is to clamp the two panels together tightly and to fuse the drilled out opening together – this will leave a small welded ring – after several of these spots are welded together the welded and hammered and dollied to remove some of the distortion – they then the center of the weld ring is filled – minimal weld grinding is needed – the welds are then re-hammered and dollied to bring back to smooth – this is the process for rewelding every spot weld on the panel – Trimmed the forward cut line of the trunk floor and made an extension panel with a step to lap over the existing trunk floor – clamped the extension panel in place and tack welded	4.5
05/06	Finished welding the extension flange on the trunk floor assembly – ground the welds and hammered and dollied the weld seam smooth – moved the shrinker to the edge of the table and worked the edge of the seam to remove the remain distortion – continued welding the spare tire well	4.0
05/08	Clamped the forward brace back in place and began re-welding the spot welds working the panels as needed – finished welding around the spare tire	2.0
05/09	Began welding the left side gas tank brace into place at each of the spot welds – worked out the distortion in the panel working from the wheel well out to the brace and back to the rear cross brace	1.5
05/10	Finished welding the left side brace and removing the distortion from the panel – using the belt grinder – ground the welds inside the brace and hammered and dollied the panel back to smooth using the torch to shrink the badly distorted areas	1.0

05/11	Repaired the hole in the floor around the front of the right side gas tank brace – fully ground the welds, hammer and dollied smooth – welded the right side floor brace in place – welded small vertical bracket to the rear of the trunk floor – began welding the rear cross brace in place	6.0
05/12	Finished welding the rear cross brace in place and began working out the distortion along the entire panel – attempted to mount the full assembly in the rear of the car – strapped the rear of the car to the lift rails to limit movement and allow for the trunk floor to be pushed in place  Note: With all the panels removed the car is very light in the rear which is why the car had to be strapped to the lift.	2.5
05/13	Used the torch to sweat the lead off the car around both rear quarters – began cutting away the passenger rear quarter of the car at the spot welds to relieve the sprung tension on the wheel well – the trunk floor would not push forward the remaining amount until the rear quarter was cut loose	1.5
<b>Total Hours:</b>		<b>27.5</b>





Project: 1974 Alfa Romeo      Week: 5/15/17 to 5/19/17      Labor Log #: 05

Day	Labor	Hours
05/15	Finished removing the passenger side rear quarter to be able to fully pull the trunk floor forward into the original location - used clecos to lock the floor into place in as many of the locations as possible - drilled out the spot welds of the battery hold down to remove - fabricated a new battery hold down from 14 gauge steel - media blasted the battery tray to remove the rust from the seams - coated clean metal in weldable primer - welded new battery hold down in place and began welding the battery tray back together at the spot welded seams - began trying to pull the driver's side of the trunk floor forward however, like the passenger side, the buckled rear quarter was holding it locked in place - drilled the spot welds along the wheel well opening and the bottom front seam of the rear quarter and popped the rear quarter loose at the seam - Worked the inner wheel well back in place and started to align the trunk floor with the original spot welds using the clecos to hold in place - removed interior door trim, vent window cranks, arm rest and interior door handles, outside side view mirrors - placed paper along rear hatch - Media blast battery tray.	8.5
05/16	Finished welding the battery tray together off the car and the mounted to the trunk floor assembly in the car and pulled together with the clecos - with the floor fully mounted and locked in place there was a minor twist present in the pan causing the driver's side to sit up slightly higher than the driver's side - before final welding of the trunk floor was completed weights were used to bring the driver's side down while the passenger side was pushed up - it was then noticed that this pulled the gas tank braces and caused them to put a dip in the floor - using the torch to lightly heat the panel while pushing up on the braces the tension was able to be relived and the trunk floor stay flat - minor distortion in the panel was worked out and hammered and dollied smooth - With weights still on the driver's side and the passenger side being pushed up the final welding of the outside trunk floor to wheel well brace on the passenger side could be completed - worked the distortion out of the panel - removed outside trim on either side - Bertone emblems from either side - drilled out screws from interior door trim that were striped to removed interior door trim.	6
05/17	Finished welding the battery tray assembly to the trunk floor - and hammered and dollied along the weld seams to remove distortion - continued to work the driver's side inner wheel well back to align with original trunk floor brace - began working the major dents out of the rear quarter on the driver's side - due to the passenger side rear quarter being damaged during removal the driver's side rear quarter panel will not be fully removed to repair the damage from the accident - with the panel fully locked into place and clamped	3



	tightly in all locations the new front trunk floor flange was marked out for spot welds and clecos were placed to hold the front flange in place.	
05/18	Finished welding any remaining and accessible welds on the trunk floor with the TIG - ground down any of the welds that were blown through, worked with the hammer and dollie and re-welded - finished welding large spot welds that were in the spare tire well - removed weights from the trunk floor and the panel held its shape - removed the entire trunk floor assembly from the car - finished any non-accessible welds off the car - touched up the panel with the grinder to smooth excessive welds - welded the brace back in place under the spare tire well - After media blasting taped off the flanges that will be welded to during reassembly to prevent from being coated in epoxy (these flanges will be coated in weldable primer) - the entire trunk floor assembly was coated in two coats of grey epoxy primer - Media blast the trunk panel to prep for epoxy - Remove hood from vehicle and place onto stand. (Tape off edges of the hood's underside to protect the paint.) Begin to chemically strip paint off of the topside by spreading stripper around and then scraping off excess lifted paint -Repeat process on needed areas two more times.	8.5
05/19	Un-masked the flanges of the trunk floor and coated in weldable primer - used heavy bodied seam sealer along the seams of the trunk floor while these areas are easily accessible - used seam sealer to fill any minor porosity holes in the welds - Re-bent the passenger side brace above the suspension back straight - wiped the trunk floor assembly clean and re-installed using the clecos to hold back in place - starting on the passenger side began welding and removing the clecos one at time once the panel was locked in place repeated the process on the driver's side	3.5
<b>Total Hours:</b>		<b>30:5</b>

Project: 1974 Alfa Romeo Week: 5/19/17 to 5/26/17 Labor Log #: 06

Day	Labor	Hours
5/22	Drilled out rivets along the rocker to remove rocker cover on the passenger side - cut out the lower front panel of the rear quarter on the passenger side to expose damage inside - clamped replacement panel in place to check the fit - panel is short along the door making the gap too large - continued welding the trunk floor in place starting with the passenger brace above the suspension - continued to work from side to side welding the spot welds that lined up on the body - hammering and dolling as needed - welded the damage on the outer lip of the passenger side wheel well from removing the rear quarter - Used the DA and 80 grit sandpaper to remove all remaining paint and get entire hood down to bare metal.	9
5/23	Finished welding the brace above the suspension on the driver's side to body - Due to the suspension and spare tire well being so close to this brace small drift pins and clamps had to be used to pull the brace back into alignment with original spot welds - this took far more time than the opposing side only due to limited access - Welded the brace in place - Fabricated the two small extension on the either side of trunk floor that attach to the wheel wells - welded these in place and ground the welds.	3
5/24	Welded the square nut back in place for the fuel pump mount on the brace above suspension passenger side - Welded the strut mount for the rear hatch on the driver's side in original location - All welds in the trunk floor completed - hammered and dollied along the forward flange and worked minor distortion in the panel - ground all visible welds and wire wheeled any burnt paint or epoxy - used abrasive disc to prep any smooth surfaces - seam sealed all exposed seams - wiped the trunk panel down inside and out to clean - sprayed trunk panel in rubberized undercoating to seal - and finish the rear - the front nose of the car can now be started - started buy attempting to unfold the nose that was rolled under to expose the spot welds that will need to be drilled out	7
5/25	Went over vehicle with customer - Identified locations of missing serial plaques - Looked through and discussed condition of parts and what may need to still be replaced - Located	3.5



	and photographed engine serial number - Taped off the passenger side rocker with paper tape - Outlined the piece before using fiberglass tape to hold the shape of the pattern.	
5/26	Used a torch and scraper to remove the undercoating from the center section of the lower front nose - went over with a wire wheel and wiped clean to expose damage - drilled out the spot welds holding the lower front inner support panel and removed the panel - removed the inner vertical brace - Wire wheeled inside the grille opening and cleaned inside to begin hammer and dollie work - straightened the lower front nose and inner brace - attempted to mount the inner brace and adjusted for better fit - mounted the inner brace using clecos - the inner brace warped once it was pulled tight to the nose - attempted to straighten both panels to bring back into original shape - began drilling out he spot welds along the top of the front nose to remove the panel - sweated the factory lead off the seams to expose	5
<b>Total Hours:</b>		<b>27.5</b>



Project: 1974 Alfa Romeo      Week: 5/30 – 06/08      Labor Log #: 07

Day	Labor	Hours
05/30	Finished drilling out the spot welds along the back return of the front nose – attempted to pry up on the rear flange however the spot welds were much larger and need to be drilled out to a larger size to remove – finished prying up the front of the nose panel and drilled out the spot welds along the center section and then peeled back the hemmed seam around the headlight break the front nose panel free – once the panel was removed began to straighten the inner structure and expose the rust damage inside	3.0
05/31	Installed rear hatch hinges and front hood torsion rods - Installed hood and made adjustments - taped up rear hatch glass and installed - made adjustments to the hinge to raise the hatch slightly – worked the inner rear flange of the front nose as it was rubbing on the front of the hood due to it being bent in the accident - Bent the replacement outer rocker panel and marked out the pattern to duplicate the original contour of the rocker – using the tipping die in the bead roller, rolled the panel into shape and shrunk the edges to match the original. Hammered and dollied the panel smooth around the worked edges – marked out the holes on the panel and drilled the holes  Note: the outer rear hood corners are very tight to the body with nice gaps all around the rest of the hood	5.5
06/05	Finished removing the outer rocker skin from the passenger side - used a 36 grit grinding disc to grind the material away at the spot welds instead of drilling out the spot welds - once the panel was fully removed the new skin was fit and trimmed for jack point clearance - the skin was re-mounted and Clecos were used to hold the panel in place - The rivets holding the driver side rocker cover were drilled out and the rocker cover removed - got Standex color match - sprayed out test sheets of both colors.	7.0
06/07	Cut away the rust damage on the outer rocker panel on the driver's side to expose the rust damage inside - Cut out the patch on the driver's side lower front rear quarter and opened up to expose the rust inside - Mask off all but one hole on Passenger rocker. Tape	2.75



	vacuum to last hole. Blow out as much debris as possible. Begin to wire wheel rust from rocker.	
06/08	Continued to wire wheel the rust off of the passenger side rocker, Cleaned the undercoating and exposed rust on the front, lower edge of the passenger rear inner wheel well – made a template of the damaged area and fabricated a small patch – welded the patch in place and ground the welds – Moved the car onto jack stands in the rear – removed passenger rear tire to gain access to the back side of the patch	4.5
<b>Total Hours:</b>		<b>22.75</b>



**Project:** 1974 Alfa Romeo      **Week:** 06/12 – 06/16      **Labor Log #:** 08

Day	Labor	Hours
06/12	Removed the hood from the body and tested the thickness of the body filler along the front section of the inner hood brace - removed the body filler along the front seam of the hood to expose the brazing tacks along the hood skin to inner structure seam - used a cut off wheel to cut away the tacks - using a small chisel opened the entire seam of the hood skin around the inner structure - once the skin was released around the perimeter a wire was pulled through between the two panels to separate the glue Disassemble bumpers and clean with bronze wool - Removed door handles and strikers - Removed door glass and vent window - Masked off and coated with chemical stripper - Scraped off paint – Sandblasted the entire topside and around the edge on the underside of the hood brace - Begun blasting underside of hood skin - Removed right front vent window crank mechanism from window pivot post	20.25
06/13	Drilled out the spot welds on the front inner hood brace to remove reinforcement panel and inspected the damage that was capped with bad patch panels from the outside, drilled out the spot welds for the hood mounting plates nibbed down protruding weld beads and worked the front area lightly with a hammer and dollie to bring back into a rough shape - skim coated the area with body filler to fill the rust damage and sculpt the section to smooth for making a pattern - Masked off doors to protect interior - Coated the roof and both front fenders with chemical stripper before scraping both the chemical stripper and the paint off of the car - Reapplied two more times to remove another layer of paint and several body filler spots - Wiped down with water to deactivate the chemical - cleaned gas tank using a wire wheel and a black 3M disc - Applied heat to the undercoating to be able to scrape it off - Cleaned out the tank with degreaser before rinsing - draining and drying - Dismantled the gas tank by removing two tubes by the filler neck, the sending unit and the gauge - Media blasted the underside nose piece on the middle hood skin - Used a cut off wheel to cut the gas tank in half.	11.0
06/14	Took photos of the fuel pump and corresponded with the company who had previously rebuilt the system to gain documentation of the rebuild for our records - worked the	10.75



	<p>damage out of the two tank halves and then planished smooth - realigned the two tank halves and began tack welding back together - Finished cleaning the two gas tank halves with a wire wheel - Removed both doors and began chemical stripping the paint on the outside - Scraped off paint and the chemical before applying another coat - Scraped it clean and wiped down with water to deactivate the chemical and clean up any remaining chemical or paint - Repeated on the inside panel of the interior doors, applying two coats as well. Wiped down the entire doors - media blasted on the driver side door - damage out of the two tank halves and then planished smooth - realigned the two tank halves and began tack welding back together - Sand polyester primer on inside of hood brace with 180 as smooth as possible for pattern to be made - removed both doors off of vehicle to be stripped.</p>	
06/15	<p>Continued to weld the gas tank using the weld and heat to work the gap - 3 of the 4 sides completed - Continue media blasting the driver side door inside and outside - Removed the pin holding the passenger side door hinge to the door - Began media blasting the passenger side inside and outside - Coated the roof one more time in chemical stripper to sit overnight.</p>	9.5
06/16	<p>Went through customer provided list of inoperative or malfunctioning components - Inspected window motors, drive cables, and run channels and felt - cleaned and lubricants drive spools and cables as well as cable guides prior to installation - Operation will be confirmed at that time - Rear lighting housings and bulb sockets were cleaned and tested - Several lamp sockets were found to have corrosion or fitment issues that would likely result in poor grounding and dim or no bulb illumination - Sockets and bulbs were cleaned and tested for operation - Uninsulated butt connectors were found to be in use on left lamp wiring harness - The connectors were removed and replaced with metal crimp connects and sealed insulated heat shrink tubing - Terminals on lamp harnesses were found to have significant oxidation on them - Terminals were removed from the connectors, inspected, cleaned, and then reinstalled to the connectors - Began disassembling and testing head lamp wiring and bulbs - Cleaned terminals, and contacts - Remove passenger and driver side seatbelts - Carpet and running boards - Label and put all part in the loft - Reinstall rear passenger tire and lower onto the ground - Move outside</p>	11.75

	and mask off engine bay and interior - Use 80 grit sandpaper discs on the DA to remove remaining layers of paint from roof and front fenders - Use wire wheel to remove several spots of thick body filler.	
<b>Total Hours:</b>		<b>63.15</b>





**Project:** 1974 Alfa Romeo      **Week:** 06/19 – 06/23      **Labor Log #:** 09

Day	Labor	Hours
06/19	<p>Finished going through front lighting, cleaning connections and testing continuity - Found 2 open circuit bulbs and sourced and ordered replacements - Went through parts and laid out headlamp eyebrows to make sure all pieces are accounted for - Finished bringing the two halves of the gas tank around the cut line and fully tack welded - finished welding 3 of the 4 sides - welded the forth side where all of the main damage was to the tank - Due to working the tank back into shape the lower half continued to badly warp along the edge and will need to be cut out - Cut out the weld line and made a new patch panel for the side of the tank - trimmed to fit and began tack welding the new patch in place - Removed pinch welds from lower left rear quarter panel - cleaned area - cut out inner wheel well edge about 2"x3" made template for new metal - fabricated new piece - welded into place and ground welds - cut out lower outer section of "b" pillar - made template - fabricated new piece - welded in place and ground welds - primed all new metal - Cut out outside section passenger side "b" pillar adjacent to striker about 4"x6" - made template - fabricate piece, welded in, ground welds, primed new metal - Cut out inner rocker at the rear driver side about 12", made template, fabricated new piece, welded in place, ground welds.</p>	15.5
06/20	<p>Using the low tack pattern tape made a pattern of the inner front nose section of the hood, traced over the profile lines carved out in the body filler to reproduce the factory stamping - Cover the tape in fiberglass tape to complete the pattern and remove it from the hood - Contacted a company to possibly do 3D printing of the headlight brow and sent photos of the brow for rough estimate - Driver side lower inner rocker panel cut out 2 spots - inspected rust underneath - treated rust - made 2 templates - fabricated 2 pieces, welded in 2 patches, ground welds - Driver side front inner rocker wheel well and outer rocker support - cut out 3" of outer rocker, 3" of inner rocker, and wheel well/rocker support - made template for inner - fabricated new piece, welded in new piece and ground welds Made template for outer rocker piece - fabricated new metal, welded in place, ground welds - Made template for wheel well/rocker support, fabricated replacement, welded in and ground welds, primed all new metal - Passenger side inner rocker center of</p>	13.5

	car - cut out rust, inspected rust and treated, made template - Passenger side forward inner rocker, cut out inner rocker and wheel well/rocker support - inspected rust and primed, made template for inner rocker patch, fabricated new piece, welded in, ground welds - made template for rocker support, fabricate new metal, welded in, ground welds, primed new metal.	
06/21	Made a profile pattern of the inner hood brace where the metal steps are in the pattern - Using 3/4" plate steal made and upper and lower die for the Pullmax to duplicate the profile - once dies were rough cut they were ground to fit the profile shape - a test strip was made to ensure the dies achieve the desired profile - then a rough shape pattern was cut and roughed into shape by shrinking the outside edge and stretching slightly on the center of the radius - once the shape matched that of the flexible pattern the piece was ran through the dies to ensure the dies could make the radius bend - once finished the edges of the dies were rounded off to make for a smoother profile and the part was checked again - Removed trim from driver side eyebrow -Installed eyebrow and broken piece into the car to test fitment - Removed and epoxy broken piece back on – passenger side inner rocker center of car, cut out rust, made template, fabricated new piece, welded in new piece, ground welds, primed new metal - Cut out forward 15" of inner rocker side and bottom through circle behind cab brace and removed brace - made templates, fabricated new pieces, welded in, grind welds, primed new rocker piece and brace.	16.5
06/22	Using the roughed in shape matched it to the inside profile of the hood - When running the part through the profile dies the dimensions of the part changed and the piece does not match up to the hood - adjustments are made to the pattern to compensate for this and a new blank is cut out, worked into shape, planished smooth and then ran through the profile dies - Minor adjustments using the shrinker/stretcher were done to match the shape to the hood - the inner center step down [center flat spot] was fabricated and welded into the replacement panel to match the original shape - The part was ground clean and the inner brace was trimmed and the new section tack welded into the hood brace - Began marking out the panel for the next repair section - Passenger door lower edge, cut out 4 rust holes, made 4 templates, fabricated 4 patches, welded in 4 patches, grind welds, primed new metal - Driver door lower front inside corner, cut out entire	17.0



	inner corner, made template, fabricated new corner piece, welded in, ground welds, primed new metal - Media blasted previously repaired headlight eyebrow - Began blasting several body panels including new rear quarter, top tail, rear tail light panel, and rocker - Media blast nose of hood panel - Hung panels for epoxy	
06/23	Media blast passenger side door with fresh media to touch up missed spots - Blow out several times to ensure no more media remains - Hung up passenger door and rear piece - Sprayed in black epoxy.	1.5
<b>Total Hours:</b>		<b>64.0</b>



Project: 1974 Alfa Romeo Week: 06/26 – 06/30/17 Labor Log #: 10

Day	Labor	Hours
06/26	Driver door front inner corner, finished fabrication and welding, primed new metal, welded two rust pinholes, ground welds, prime - Cut out two 6" sections rear and middle of lower inner door, made templates, fabricated new pieces, welded in, ground welds and primed new metal - Welded hole in middle of outer door skin, hammered and dollied flat - Passenger inner rocker far rear, cut out rusted section behind last circle, made template, fabricated new piece, welded in, ground welds, primed new metal - Hung passenger side door and adjusted out to best fit - Touched up final media blasting with fresh sand to clean off flash rust and where repairs were done - Hung up blasted driver's door. Sprayed in black epoxy. continued to work the inner hood structure - made the template for the front profile of the hood and trimmed a patch panel to shape - put the needed profile into the panel and trimmed the inner hood skin to fit the patch panel - tacked the panel into place - began making more of the detail sections of the inner structure where the hood mounts are welded - continued to tack weld the pieces together to make a solid structure	16.75
06/27	Right rear quarter, lower forward section, upper tail panel - Adjusted right door fitment, adjusted trim and mocked-up quarter panel, adjusted trim and mocked-up lower quarter section, adjusted hatch hinges, mocked-up upper tail panel, repaired lower rear left quarter section, made template and contour gauge to reproduce panel for right side - Took down driver door from paint stand and installed onto the vehicle - Adjusted for best fit.	11.5
06/28	Finished making contour gauges for lower rear quarter template, Passenger side, removed mocked-up passenger quarter and upper tail panel, prepped and primed b pillar, inner rocker, inside of new outer rocker, above rocker, top of wheel house, and upper quarter support. driver side outer rocker, made template for forward section of outer rocker, fabricated new piece, welded in, ground welds and primed new metal, prepped and primed rear inner rocker, above rocker, lower b pillar, and outer edge of wheel house, made template for rear section of outer rocker, fabricated new piece, welded in, ground welds.	10.0



06/29	Driver side outer rocker rear, finished welding, ground welds, primed new metal, passenger side outer rocker, prepped pinch weld for welding, fit outer rocker, welded in.	4.5
06/30	Passenger side rocker, finished welding in, ground welds. Passenger quarter panel, hung and fit panel, prepped all welding edges, tack welded into place, mocked up upper tail panel, cut old tail panel, marked and cut new panel, tack welded into place, removed corner piece of rain channel, made template for new rain channel across the entire rear of hatch, fabricated new rain channel, removed drain spouts from old rain channel, ground off all brazing and prepped for welding, cut drain holes in new rain channel, welded on a drain spout to new piece, ground welds.	9.0
<b>Total Hours:</b>		<b>51.45</b>



Project: 1974 Alfa Romeo Week: 07/03 – 07/06/17 Labor Log #: 11

Day	Labor	Hours
07/03	Rear upper tail panel and rain channel, continued fitting upper tail panel, finished fabrication on lower rain channel, cut out rust from driver side corner rain channel, fabricated new corner, welded in new corner, fit new rain channel, primed new metal, welded channel in place, fabricated new corner pieces to join side channels to rear channel, adjusted hatch placement with shims, started repairs on the taillight panel.	10
07/04	Using the pattern made from the driver's side lower rear quarter – trimmed sheet stock to make a replacement panel for the Passenger side - Using the shrinking dies in the Pullmax roughed in the shape and then smoothed the panel in the English wheel – continued working back and forth until the panel was at the proper shape – then began tipping the edges and flanges to work to the proper contour – Began welding the rear emblem panel into place tack welding where the panel fit smoothly and then hammering the tack welds to remove distortion and bring the panel back into shape	8.5
07/05	Passenger rear lower quarter, finished fabrication of new panel, Test fit - Rear tail light panel, began repairing the badly wrinkled metal with hammer and dollies, fit tested panel Finished welding the top corner seam of the rear quarter to the emblem panel – Nibbed the welds and began working the panel into the finale shape for minimal body work required – Began welding the seam along the driver's side for the emblem panel	14.0
07/06	Rear tail light panel, straighten dents and wrinkles in metal, cut out damaged area of passenger side light, fabricated new pieces, start welding back together.	6.0
<b>Total Hours:</b>		<b>38.5</b>





**Project:** 1974 Alfa Romeo      **Week:** 07/10 – 07/14      **Labor Log #:** 12

Day	Labor	Hours
07/10	Tail light panel, continued fabrication of tail light surround, test fit lights - Driver front fender, cut out old patches from top and center of fender, made a template of top section, cut out pinch weld from under top edge, fabricated new fender patch, fabricated new pinch weld section, test fit hood - Passenger front fender, cut out old patches from top and center, made template for top section, fabricated new patch, test fit hood.	10.0
07/11	Driver side front fender upper rear corner, cut out rust from pinch weld, fabricated new piece, welded in and ground welds, welded in new patch for fender, ground welds, cleaned surface to prep for lead work, leaded entire patch and filed smooth - Passenger side front fender upper rear section, cut out rust from pinch weld, fabricated new piece, welded in, ground welds smooth.	10.0
07/12	Passenger side front fender upper rear section, cut out rusted pinch weld, fabricated new piece, welded in and ground welds - Repaired small piece of opposing pinch weld with new metal welded in, ground welds - Welded in new patch onto upper fender, ground welds, cleaned and prepped metal for lead, leaded over patch, filed lead smooth - Driver front fender, cut out rust at the rear body line, fabricated new piece, welded in, ground welds - Passenger front fender, cut out rust at body line next to wheel well, fabricate new piece – continued work on the inner structure of the hood.	12.0
07/13	Passenger side front fender edge of wheel well, prepped and primed metal behind new patch, welded in new patch, ground welds - Roof rear passenger side, using the shrinking disc, shrunk metal at damaged area, prepped area for lead, leaded entire corner, filed lead smooth - Tail light panel, continued repair, started fabrication of new top edge – finished right side of inner hood structure & ground welds smooth	13.0
07/14	Continued repair on tail light panel, fabricated new top section, cut out old piece, welded in new piece, hammered smooth.	8.5
<b>Total Hours:</b>		<b>53.5</b>



Project: 1974 Alfa Romeo      Week: 07/17 – 07/28      Labor Log #: 13

Day	Labor	Hours
07/17	Finish repair on tail light panel, mocked up panel in rear of the car – Back on the inner hood brace - cut out rust and fabricated new section where hinge plates bolt on	9.00
07/18	Continued fabrication of damaged section of hood brace – Vent for top of instrument cover is broken and falls off - Assessed and repaired vent by marking and drilling a small hole and tapping thread to mount a small screw with integrated washer - Removed dried glue from underside of hood panel before blasting entire piece - Used acid rust remover along with a red scotch brite to clean up and remove flash rust from top of car and fenders	15.00
07/19	Finish the fabrication on the front of the inner hood brace - Cut out rust from the rear section - weld in new pieces - dolly and blend welds. – <b>4 hours Removed</b>	5.50
07/20	Hood brace, cut out damage from rear center section, fabricated patch panel, welded in, hammer and dollied smooth, ground welds.	10.00
07/21	Remove bolt plates from hood panel - Scrap panel bonding adhesive from both hood panels. Coat edges of underside of hood panel with Rust dissolving acid to remove small pit rust - Fabricated new inner hood brace for backside of hood skeleton	5.25
07/24	Lay out contour lines on the passenger side rear quarter to make templets of the rear quarter to transfer over to the driver's side - Hammered and dollied Nose panel and inner support straight - Sand blasted the hood for more metalwork - Cut out additional damage found on the Hood brace – fabricated a new patch, welded in, applied weld through primer inside of hood brace. Welded in hinge plates, welded in inner brace to hood skeleton.	14.00
07/25	Hood brace, finish repair on inner hood brace, test fit onto car. Driver rear quarter, fabricate contour templates from passenger side quarter, transfer reference marks onto driver quarter, hammer and dolley damaged areas smooth working from the top down	11.00



07/26	Driver rear quarter next to forward body line - cut out old patch, fabricated new patch, welded in, ground welds. Adjust driver door to fix gap between door and quarter, modify quarter panel forward extension for correct door gap and correct trim gap at body line.	9.50
07/27	Tail light panel, install into final position with clecos, adjust position of passenger rear corner of hatch opening and weld into position, finalize position of both quarter panels and cleco in place - both rear quarter panel extensions put into final position with clecos. Begin repair of rear valence.	10.00
07/28	Begin to straighten both rear valence panels.	4.00
<b>Total Hours:</b>		<b>93.25</b>

41.75

42.50



**Project:** 1974 Alfa Romeo **Week:** 10/24-11/22 **Labor Log #:** 14

Day	Labor	Hours
10/24	Due to nonpayment and no response to text messages sent on 9/25, 9/27, 9/28, 10/16, and 10/23- Moved all parts out of car and vacuumed. Placed longer parts on carboard in rear areas. Boxed small parts and put boxes in cab. Put gas tank in trunk area. Unbolted inner hood frame section and removed. Coated front fenders, rear tail section, both parts of the hood, and the roof in weld through primer. Reinstalled inner hood frame. This was done to prevent further flash rusting and to consolidate parts. Moved car out of metal shop and into long term storage until a game plan could be established with customer.	2.25
11/09	Email was sent on November 3 <sup>rd</sup> requesting payment and a game plan for completion or that the car be removed by November 8 <sup>th</sup> or storage fees would be applied starting from August 8 <sup>th</sup> .  At 11:08 am final text message was sent to customer, stating we would be packing up the vehicle and it would need to be removed. With no response by the deadline the initial packing of the car began.  Began moving parts and hardware from the loft. Wrapped parts and transferred over to carboard boxes. Moved boxed up parts into the trunk of vehicle.  At 5:01pm we received first contact from the owner and packaging of the vehicle was stopped. Customer requested we waited until the following week to receive past due payment as well as advance for additional repairs and to discuss with him in person further game plan for completion.	4.75
11/17	Received payment for past due and advance for additional repair work. Discussed time line and budget for project completion. Discussed customers desire for specific spreadsheet documentation.	0.0
11/21	Formed patch panel for nose of hood area in front of scoop. Patterned existing parts (hood and hood scoop). Made test piece and patch panel using bead roller and hammer forming techniques.	9.0
11/22	Welded the two portions of the patch together. Cleaned up and chased details on the panel.	5.5
<b>Total Hours:</b>		<b>21.5</b>



**Project:** 1974 Alfa Romeo **Week:** 12/07-12/21 **Labor Log #:** 15

Day	Labor	Hours
12/07	Unbolted and moved both hood pieces into blasting booth. Sandblasted entire hood brace front and back. Sand blasted both inside and outside of hood skin except for the center section where repair will be done. Blew off both hood pieces. Hung up hood brace, and set hood skin on stand. Masked off needed repair area. Sprayed both sides of hood brace and inside of hood skin in black epoxy.	7.5
12/08	Mixed epoxy, blew and tacked off, and sprayed 2 wet coats.	.75
12/12	Radiused the corners of the nose panel patch. Put blue dye on the hood. Scribed the patch edges into the blue dye on hood. Cut the hood section out with air saw on the inside of the line. Once the whole panel was cut out, the grinder was used to sand just up to the scribe line. Kept trimming the edges until the patch panel fit. Once it fit properly, it was tacked into place on the peaks to keep them lined up. Tacked every two inches and after each tack, hammered and dollied. Tacked until they were about 1/8 <sup>th</sup> -1/4 <sup>th</sup> away from each other.	7.5
12/20	Welded part of nose patch on the hood. Hammered and dollied the weld. Finished welding the passenger side, and hammered and dollied the weld. Ground down the front and the back of the weld. Hammered and dollied, running a clean pass over the weld to smooth the panel.	10.0
12/21	Welded the hood, hammered and dollied the weld to make it flat and workable. Finished welding the one side. Hammered and dollied the weld. Ground the weld down to take the pointed edges off. Hammered and dollied, ground down the material and repeated these steps.	4.0
<b>Total Hours:</b>		<b>29.75</b>





**Project:** 1974 Alfa Romeo      **Week:** 01/09-01/18      **Labor Log #:** 16

Day	Labor	Hours
01/09	Before the rear of the car could be welded solid the panels needed to be moved for the car to sit level in the rear. Relocated clecos and adjusted panels as needed to level out the rear of the car.	8.0
01/10	Verified proper alignment of tail light panel on rear body panels. Welded into place after prepping all edges and painting with weld through primer. Prepped inside of lower right quarter panel extension and painted with weld through primer. Dollied smooth the upper valance, welded and blended cracks and edges, and prepped backside, then painted in weld through primer. Mounted into place with cleco's, welded cracks in lower valance, and ground and blended smooth. Began dolling edges straight and smooth.	10.0
01/11	Straightened upper edge of rear lower valance with hammer and dolley. Block sanded panel to show where the waves and dents were. Hammered and dollied panel smooth, test fit, and started to adjust to fit in opening.	10.0
01/12	Finished adjusting and leading edge to match door profile and correct door gap on driver side front quarter panel extension. Fabricated mounting flange for front edge, welded into place, and ground and blended smooth. Prepped all metal and paint with weld through primer, welded into place, and blended smooth.	7.0
01/15	Mounted passenger side front quarter panel extension into place. Marked location of where front edge should be, and moved bend forward until correct door gap was achieved. Hammered and dollied smooth and mounted into place with clecos's.	7.0
01/16	Finished modification of panel extension on passenger side front quarter panel. Fabricated return lip at door jamb, welded new lip onto panel, and ground and blended welds. Prepped all metal and painted with weld through primer, welded panel into place, and ground and blended welds smooth.	7.0
01/17	Drilled out the bigger holes in the trunk panel, and welded all holes making sure to fully penetrate through both panels. Ground down the tops of all the welds, once welds were flush, Abrasive wheel was used to smooth all edges. Repeated this process with driver's side rear wheel well, and drivers side front quarter panel extension. Went over all bare metal with weld through primer.	10.0
01/18	Prepared passenger side wheel well lip for welding. Drilled 5/16 <sup>th</sup> holes in the lip approximately every 2". Welded and blended out the holes. Welded the corner of the trunk panel and blended out. Drilled 5/16 <sup>th</sup> holes in a piece of angle that will be a brace for the rear quarter extension. Welded the angle in and blended out the welds. Drilled	5.0

	holes for the cleco's and cleco'd the panel back into place. Removed car from jack stand and put wheels back on.	
<b>Total Hours:</b>		<b>64.0</b>





**Project:** 1974 Alfa Romeo      **Week:** 01/19 – 05/04      **Labor Log #:** 17

Day	Labor	Hours
04/12	Began to clean out seal around windshield so that the body could be prepped for epoxy	1.50
04/13	Finished cleaning out sealant around the windshield – cleaned and prepped inside of car for masking - Masked off the inside of the vehicle so that no dust from prepping the body would get inside – Began going over the body with 80 grit sand paper to prep the body for epoxy starting with the driver's side	5.50
04/16	Continued to prep the car for epoxy using 80 grit moving from the drivers side to the roof	9.50
04/17	Sanded front fenders and inside door jams – Once the whole body was gone over with 80 grit to remove surface rust and weldable primer the body was masked off to prep for media blasting to ensure better adhesion for the epoxy – removed the doors and media blasted inside door jam.	10.0
04/18	Continued working on passenger side of the body – Prepped passenger side for epoxy and sprayed in epoxy	8.25
04/19	Unmasked the vehicle and cleaned the media from the inside of the vehicle	3.00
04/23	Continued to work the patch on the front of hood skin – shrinking and working as needed to pull the panel into the proper shape – began fitting the center trim and working the sheet metal for a proper fit – Finished welding the section in place and tipped the front edge of the panel to begin mock fitting to the inner structure – More work will be needed	6.50
04/26	Straightened rear valence, corrected body line, made adjustments to right rear quarter extension. Mounted valence and extension drilled more Cleco holes	2.50
04/30	Welded rear panels together. Finished fitting the right rear quarter panel extension, Clecoed into place, drilled more holes in between every Cleco around the back of the car. Welded in rear panel below tail light panel, welded in rear valence, welded in both rear quarter panel extensions, welded rear quarter panel extensions to wheel housings, finished welding upper rear panel behind hatch opening, hammered and dolleyed smooth.	11.25
05/01	Finished welding tail light panel from underneath, straightened damaged piece that attaches to the inside of the rain channel at the back of the hatch, clamped into place with a large number of clamps as needed, welded into place at all the drilled-out spot welds, smoothed out the ends and welded into place, straightened the braces that come off the backside of that panel and attached it to the tail light panel. Welded both braces into	10.0



	place, finished capping off the corners of the rain channel and welded into place. Welded a piece on the corner of the driver side rear quarter panel extension, ground and blended smooth, hammered and dolleyed driver side upper tail panel, repeated procedure as needed until smooth. Repeatedly hammered and dolleyed passenger side rear upper quarter panel where it meets the upper tail panel seam until smooth.	
5/02	Welded together rear valence and center brace, ground smooth all the welds on the inner trunk panel that the latches mount to, ground smooth the welds on the lower rear panel. Bolted rear wheels on, put car back on the ground - Prepped and masked up for blasting. Moved car into the blasting booth	7.0
05/03	Unmasked the back of the vehicle from being media blasted – cleaned out the inside of and prepped the back side of the panel by hand with 80 grit – This area could not be media blasted due to the amount of media that would flood the inside – finished sanding interior and moved to prepping the back side of the panels under the car – Wiped the prepped areas down – Back masked the area to prevent overspray – Coated the prepped areas in epoxy primer	10.75
<b>Total Hours:</b>		<b>85.75</b>



**Project:** 1974 Alfa Romeo **Week:** 05/05 – 06/15 **Labor Log #:** 18

Day	Labor	Hours
05/07	Moved boxes of parts down from loft and into front bay - Wiped down interior pieces and boxed carpet pieces. Continue and prepping the back side of the tail panel inside trunk and under rear of car – sprayed bare metal in epoxy	3.75
06/14	Welded closed the spot weld holes that were drilled out so the nose panel could be reinstalled - Welded small rust holes that were in the inner nose panel – ground welds and cleaned the inner panel - Coated the inner panel in rust converter – Media blasted the front nose panel then coated the back side on the nose panel in weldable primer - Used the shrinking disc on the hood to bring it into shape - Put the hood together and hemmed the edges down - Hammered back the front edge of the hood aligning it with the front nose piece and making sure they match up properly	8.50
06/15	Fit the front nose panel on and clecoed it in place where it fit. Moved the returns on and off of the car where needed to make it fit – Began welding the nose panel in place	2.00
06/18	Continued on the front nose - Spot welded the bottom hemline together. Spot welded the inner side of the nose to the return. Welded the outer edges of the panel into place. Put the hood on and adjusted it into place - Cut the nose panel to correct the gap spacing between the hood and the nose. Once the sections were gapped properly a tack weld was put into place to hold it - Welded the nose panel where it was cut open. Ground and blended out the welds - Wire wheeled the nose panel where it was to be leaded. Tinned over the driver's outer seam. Heated the panel with the torch. Leaded the seam. Filed down the lead until it was smooth and was the proper shape.	10.50
06/19	Wire wheeled the rest of the nose panel to prepare for lead - Starting at the passenger side and moving towards the driver's side: Tinned the seam - Applied the lead to the heated areas. Flattened the lead to the correct height with the wooden paddle. Filed the lead down using increasingly finer files - Brought the lead to the correct shape - Went over the leaded sections with the black abrasive Put must for rust on the front nose to prevent flash rusting and clean residue.	10.25
06/20	Mig welded the fuel tank patch into place. Ground down the welds to make them smooth for leading - Ground down paint on inside hood channel to prep for media blasting - Taped off engine bay for media blasting – Moved vehicle into the blasting booth and masked off front nose and from windshield to rear of car to prevent blast media from getting into the car – Media Blasted then Blow off front end of vehicle and hood - Sprayed two coats of black epoxy primer on hood jams, front nose, around jams on lower grill, the front end of the hood, and the lip of the front underside on the hood	11.50



<b>06/21</b>	Scuffed the nose with 120 - Applied body filler on nose. Sanded down with 80 grit then reapplied body filler - Finished hard sanding down body filler with 80 grit – Moved onto the front nose area adjusting the hood as needed for the a better fit – body worked front nose of hood and began scuffing entire car going over and marking areas in need of body work - Blow off front end of vehicle from bodywork - Spray two coats of epoxy	<b>6.50</b>
<b>06/22</b>	Finished scuffing areas with medium scuff pad - Applied body filler to rear roof corners, drivers side quarter panel above wheel well, rear passenger quarter above gas door and both corners between windshield and hood – Block sanded – Used the shrinking disc to correct high spot on the roof - Blow off then re-mask as needed to prep for epoxy - Spray 3 coats of black epoxy over bare metal areas	<b>5.75</b>
<b>06/23</b>	Body work the area around that that was worked with the shrinking disc – scuff bare metal break throughs with 80 and coat with epoxy – After epoxied area flashed went over entire car scuffing and blending out the epoxied and body worked areas – Masked off the car and sprayed entire exterior in 2 coats of epoxy primer – 3 coat on the front of the hood  Note: This car is not ready for paint and additional body work is required.	<b>5.00</b>
<b>Total Hours:</b>		<b>63.75</b>