Tubing Parts List

1-5/8" X .134 Tubing

Part #	Description	Qty	Length
#1	Lower Four Link Crossmember	1	72"
#2	Front Frame Rails	2	120"
#3	Front Frame Rail Crossmember	1	24"
#4	Main Hoop (Bent To Each Car)	1	
#5	Trans Crossmember	1	24"
#6	Window Bar Outriggers	2	30"
#7	Top Hoop (Bent To Each Car)	1	
#8	Window Bars (Bent To Each Car)	2	60"
#10	Dash Bar	1	60"
#13	Parallel Support Bars	2	60"
#14	Front Down Bars (Strut)	2	72"
#17	Main Door Bars	2	60"
#22	Four Link Mounting Uprights	2	13"
#23	Upper Four Link Support (Passenger)	1	60"
#25	Upper Four Link Support (Driver)	1	30"
#27	Funny Car Cage Seat Back Bar	1	48"
#28	Front Funny Car Cage (Inside)	1	60"
#29	Rear Funny Car Cage (Inside)	1	28"
#30	Front Funny Car Cage (Outside)	1	36"
#31	Funny Car Cage Center Rear Supports	2	28"
#32	Funny Car Cage Center Top Supports	2	12"
#34	Lower Seat Back Bar	1	30" 3" @ 90
#35	Seat Back Bar Support (Inside)	1	18"
#36	Seat Back Bar Support (Outside)	1	24"
#37	Rear Frame Rails (Front)	2	42"
#38	Rear Frame Rail shock Crossmember	1	24"
#47	Rear Frame Rail Crossmember (Rear)	1	24"

1-1/2" X .095 Tubing

Part #	Description	Qty	Length
#39	Frame Rail Uprights In Front Of Rear	2	14"
#40	Rear Support Loop From Main Hoop	1	78"
#41	Upper Frame Supports To Main Hoop	2	30"

1-3/8" X .095 Tubing

Part #	Description	Qty	Length
#19	Upper Midplate Crossbar	1	72"
#20	Midplate Crossbar Supports	2	30"
#21	Lower Midplate Supports (Frame Rail)	2	30"
#42	Upright Front Of Rear Supports (Front)	2	32"
#43	Rear Frame Rail (Front) Crossmember	1	24"
#44	Rear Frame Rail Lower Supports (Front)	2	36"
#45	Upright Front Of Rear Supports (Rear)	2	18"
#46	Rear Frame Rails (Rear)	2	60"
#48	Rear Frame Rail Support Bars (Rear)	2	66"

1-1/4" X .083 Tubing

Part #	Description	Qty	Length
#9	Roof Diagonal	1	55"
#11	Center Floor X-Brace	2	50"
#12	Diagonal Floor Supports (Outside)	2	60"
#15	Front Down Bar Supports	2	48"
#16	Motor Mount Uprights	2	18"
#18	Secondary Door Bars	2	60"
#24	Four Link Upright Diagonal (Passenger)	1	24"
#33	Front Funny Car Cage Support (Outside)	1	18"
#56	Trans mission supports from four link	2	48"
#58	Seat Front Crossmember	1	24"

1" X .095 Tubing

Part #	Description	Qty	Length
#26	Rear Drive Shaft Loop Uprights	2	13"
#61	Rear drive shaft loop U-bends	2	

1" X .065 Tubing

Part #	Description	Qty	Length
#49	Rear Frame Rail (Center) Crossmember	1	24"

Part #	Description	Qty	Length
#50	Rear Frame Rail Uprights (Rear)	2	18"
#51	Rear Frame Rail Support Crossmember	1	24"
#53	Rear Frame Upright Support Bars	2	24"
#57	Rear Frame Rail Diagonals (Front)	2	24"

7/8" X .065 Tubing

Part #	Description	Qty	Length
#52	Rear Frame Rail Upright Diagonal	1	26"
#54	Rear Frame Rail Diagonal (Rear)	1	30"
#55	Rear Frame Rail Diagonal (Front)	1	30"

3/4" X .058 Tubing

Part #	Description	Qty	Length
#59	Roll Cage Gussets	4	6"
#60	Funny Car Cage Helmet Bars	2	24"

Note: Part # 4, 7, 8, 40 Are bent from the customer spec sheet

Assembly Instructions For Pro Super Class Chassis

NOTE: Please read the instructions before starting in installation

The instructions for the Pro Super Class chassis are designed for the chassis builder or the home builder with the basic equipment and a lot of spare time.

Some of the more important equipment necessary to build the Super Class will be: Wire welder or Heli-arc (Heli-arc must be used on chrome moly) Bench or hand grinder, Drill press, hole saws, angle finder, plumb bob, carpenters square.

You will need an area about 10 x 20 to build the Pro Super Class. The surface needs to be as flat and level as possible. It will not be necessary to have a jig to build this chassis. On the chassis drawings supplied with the kit are all the important dimensions that can not be changed.

Lay all of the tubing out on the floor in sizes. Check all of the tubing to the parts list. On the chassis drawings note that all the tubing has a number by it. Follow the numbers 1 thru 61 for the sequence of assembly.

Before the installation can start The following instruction will help you take the following important measurements that will be used in the assembly of the chassis.

Wheel Base (Front to Back) _____
Front Track Width at Ride Height
using the new wheels and tires _____
Wheel to wheel Measurement
For rear end width _____
Tire to tire measurement
For the rear width _____

1...The center of the rear axle centerline must be marked on the outside of the rear fenders before you start. This can be done by standing a large carpenters square on the floor with the edge even with the front edge of the rim. Repeat this on the rear edge of the rim. The center of these two marks will be the axle centerline. Use the plumb bob to transfer this mark to the out side of the rear fender.

2...Repeat this to the other side of the car. It is very important that the car is not moved until both side are marked on the outside of the fenders. Measure to the front wheel centerline for the wheel base if you don't know it off hand.

3...Remove all the components from the car so all you have left is the body shell with the front end still attached.

4...Place the body on wood blocks at the ride height you want the car to be when it is finished. Support the body at the rocker panels and the rear of the car. Don't level the car at this time.

5...Cut the entire floor and fire wall and rear wheel wells to the fender lip of the car. Trim the floor up to the rocker panels or cut the rocker panel out depending on how the main hoop was ordered.

6...With the body cut out level the car from side to side and make sure that the car is at the ride height you want it to be when done. (Including the front end)

7...With the front end on the car place the two front wheels and tires under the front end at the correct distance from the fenders. Measure between the mounting surfaces of the wheels for the front track width. Write this measurement down in the instruction booklet along with the wheel base.

8...two other measurements that can be done at this time is the wheel to wheel measurement for the rear end. This can be done by rolling the wheels and tires under the car placing them in the wheel openings where you want them. **(NOTE:** Remember that you will need at least 3" to the fender so the rim can slide off the studs and at least 3" at the top of the tire to the fender.) If there is not 3" at the top of the tire the body will have to be raised up and leveled. After the tires are set in place measure between the mounting surfaces of the wheels and the bulges of the tires. Write these measurements down in the instruction booklet.

9...Now that all of the measurements are done the front end can be removed.

10...A chassis centerline will need to be made down the center of the body. This can be done by finding the center of the rear of the car and use the plumb bob to transfer the center to the floor. Find the center of the windshield and transfer this to the floor with the plumb bob. With the floor marked in the front and rear a chalk line can be used to pop a line from the rear of the car to about 6 feet in front of the fire wall.

11...Use the plumb bob to transfer the rear axle centerline marks made on the outside of the rear fenders to the floor on each side. Pop a line with the chalk line from side to side.

12...One of two things can be done to keep the lines on the floor. You can spray them with clear spray paint or trace over them with a fine point magic marker.

The frame can now start being installed into the car.
As the installation goes along the frame rails and other bars in the floor will have to be held at a height of 6" off the ground. The best way to do this is to use wood blocks and thin shims to level the parts. On the rear frame pieces that are a lot higher off the ground jack stands can help hold them in place.

13...Measure from the rear axle centerline forward 25-1/8" on each side of the car even with the inside of the rocker panels. Use the carpenters square to transfer this to the inside of each rocker panel.

14...Measure between the rocker panels at about 8" forward of these marks. Find bar (#1) and find the center of the bar between the bends. use the measurement of between the rocker panels and measure half way out each way from the center mark.

15...Install this bar into the car at a height of 6" from the ground to the bottom of the bar and the back side of the bar even with the line made 25-1/8" from the rear axle centerline. Mark the area where the bar meets the rocker panel. Remove the bar and clean this area so the bar can be tack welded in place. Reinstall the bar and use a straight edge on the back of the bar to line it up with the marks on the rocker panels. tack weld in place when lined up.and level

16...Measure forward from the rear axle centerline on each side of the car the amount of the wheel base written down in the beginning of the instructions. Use the chalk line to pop a line between these marks. Clear spray paint or trace this line like the others.

17...Use the carpenters square to transfer the chassis centerline to the

center of the of bar #1. Measure each way from this line 11" and mark. This will be the outside width of the front frame rails.

18...Notch one end of each front frame rail (#2) at 90^0.

19...Measure from the front side of the rear crossmember forward 24" pass the front axle centerline and cut off each frame rail the same length from the notch.

20...Set these rails in the car at a height of 6" from the ground to the bottom of the rails. Line up the outside of the frame rails with the lines made on the rear crossmember at 11" from center. Use the carpenter square to measure from the chassis centerline to the outside of the rails at the front the same distance. Measure the inside width of the frame rails and make the front crossmember (#3).

21...Tack weld the top of the rear frame rails to the crossmember (#1). After installing the front crossmember 2" in from the end of the frame rails recheck the distance from the centerline to the frame rails. Tack weld the crossmember in after it is square and level. This crossmember can be moved later if you want to shorten the front of the frame rails.

22...Measure from the top of the rear crossmember to the roof for the height of the main hoop (#4). Stand the main hoop on its top with the leg pointing up. Measure up each leg and mark at the height needed. Cut off each leg as marked. (If your not sure cut it a little long you can always cut more off if.needed.)

23...When the main hoop is standing on the crossmember it should fit tight against the roof before it is notched for the crossmember. Trim a little at a time until it fits. Mark the angle of the notches while it is setting on the crossmember.

24...When the main hoop is notched and centered on the crossmember lean it back at a 5 degree angle towards the rear of the car. Tack weld in place when set.

25...Place a motor and transmission into the car with the proper clearance a the windshield. The motor can be moved back further but if you plan to run 7.49 or faster the transmission mount and the front window outriggers must line up for the SFI rules!. Also the midplate crossbar and supports may have to be left out or modified to accommodate the block being back so far. Most of the time #1 plug even with the centerline is fine. Block the front of the block up at 12" and the transmission output

shaft at 12" for now. (The transmission will be raised up when the rear end housing is installed.)

26...Notch the trans crossmember (#5) to fit between the frame rails so it lines up with the transmission mounting holes. Tack weld in place when square and level.

27...Measure from the main hoop forward to the windshield for the length of the top hoop (7). Stand the top hoop on end with the legs pointing up. Measure from the ground up to the leg to the length needed on each side.

28...Hold the top hoop in place and have someone mark the bars where they need to be notched. (You can make a handy tool to help hold up the front of the top hoop. This can be made by welding a 4" piece of roll bar tubing to one end of a 24" piece of 1 x 1 square tubing. Cut the tubing in half to form a U. Clamp another 24" piece of 1 x 1 tubing to it for the length you need to hold up the front of the top hoop.)

29...Level the top hoop from side to side and front to back. Tack weld in place.

30...The window bars (#8) and the outriggers (#6) will have to be fit at the same time. Also the dash must be removed from the car. Cut and notch the top of the window bars so the bar follows the window post and the bend fits at the bottom of the windshield. Only cut the bottom part of the bar off so it rest on the floor or so it goes past the bottom of the rocker panel.

31...Hold the window bar in place with the bottom against the rocker panel. Trace a line on the rocker panel even with the front and rear side of the bar. Cut and fit one of the outriggers to go from the frame **even** with the transmission crossmember to the rocker panel. The bar must meet the rocker panel in the center of the lines made on the rocker. This bar can be raised up for header clearance or level as long as it lines up with the lines on the rocker panel. Tack weld the outrigger in place. Repeat this on the other side of the car. **NOTE: Both sides of the car must be the same!**

32...Cut and notch the bottom of the window bars so they meet the outriggers one inch from the end. (Take your time notching the bottom because you can make them to short real easy.)

33...The roof diagonal (#9) will go from the center of the bend on the front driver's side of the top hoop to the passenger side rear. Tack in

place when fit.

34...The dash bar (#10) can be cut and notched to fit between the bends on the window bars. This bar must be below the dash.

35...The center floor X-braces (#11) will be the next ones to go in place. Mark the transmission crossmember at 2-1/2" in from the frame rail on each side. This much space will be needed between this bar and the frame rail to install a bar in this area at a later time. Cut and fit one of the bars to go from the line on the passenger side of the crossmember to the rear crossmember 3" in from the frame rail where it meets the rear cross-member on the driver's side. Tack weld in place. Measure and cut the other piece of tubing for the front and rear half of the X-brace using the same measurements. Use a straight edge or string to help line up the front and rear half of the X-brace. Tack weld both pieces in place when lined up.

36...The parallel support bars (#12) will go between the front outriggers for the window bars and the rear crossmember that the main hoop mounts to. Measure between these two bars so the parallel supports can be cut and notch to fit between them even with the main hoop and the window bars where they mount at the bottom. Tack weld both in place.

37...The diagonal floor supports (#13) will be the next ones to install. These bars will go from the rear crossmember where the front frame rails attach to the front window outriggers where the parallel support bars mount. Tack weld in place when fit.

The strut installation jig along with the struts, strut brake kit and upper mounting brackets for the strut. (which are sold separately from the chassis kit).will be needed to install the front down bars (#14).

38...Measure forward from the rear axle centerline on each side of the car and mark the floor at the wheel base measurement. Draw a line from one mark to the other. Once this line is drawn stand the carpenters square on this line even with the outside of the frame rails and mark the front axle centerline on the frame rails.

39..The strut installation jig will have to be assembled now. Tack weld one of the mounting posts to the bottom rail of the jig at a 90 degree angle to the front and back and side to side.

40...Assemble the steering arms, lower mounting studs and just the brake hubs with bearings on the struts. Bolt the driver's side strut to the mounting post of the strut jig by placing the spindle shaft through the

hole in the jig and tighten the spindle nut. This will enable you to hold the strut at 0 degrees camber and 8 to 10 degrees caster while the top and bottom mounts are being made.

41...To make lining the jig up on the axle centerline a little bit easier make another line one inch to the front and rear of the axle centerline. this will make a space 2" wide for the jig to set between. NOTE: this jig is set up for 24" tall tires. If you are using a taller tire you must raise the jig up half the difference.

42...With the strut mounted to the jig and lined up with the axle centerline slide the jig towards the frame rail until you have a measurement of half the front track width from the chassis centerline to the wheel mounting surface of the hub on the strut. once this is done tack weld a piece of scrap metal from the top of the strut jig to the frame rails on each side to keep the jig from moving.

43...To assemble the other side of the strut jig measure from the outside of the frame rail to the 2x2 mounting post of the jig on the first side. Place the mounting post for the passenger side at the same distance from the frame rail on the passenger side. Tack weld it so it is 90 degrees front to rear and side to side.

44...Mount the second strut to the jig as in the earlier step. Check the track width after the strut is mounted. Use an angle finder on the steering arms to set the struts at 8 to 10 degrees caster. Both must be the same angle.

45...Bolt the top mounting brackets to the top of the struts. Fit the front down bars (#14) to go from the window bars (In the area of the bend) to the brackets on the top of the struts to the area at least 15" or more in front of the front axle centerline. The top mounting brackets for the struts are designed to be mounted in the bends of the front down bars. It may be necessary to trim or bend the top mounting bracket for a good fit. Before starting the installation set the struts at ride height. Ride height is a 1/2" of shaft showing below the red snubber with it up in the cap all the way. Check this during the installation. (Follow the instructions that come with the struts for setting the ride height.)

46...With the front down bars tack welded in place check that the rear and the front of the bars are the same on each side. If everything checks out go ahead and tack weld the upper strut mounting bracket to the down bars. (check the ride height of the struts.)

47...The supports for the front down bars (#15) will go in 2" to the rear of

the upper strut mounting brackets on the front down bars to about 4" from the bottom of the window bars. Tack weld in place when fit. (When the chassis is complete check these bars for tire clearance before welding.)

48...The front motor mount uprights (#16) will be the next to go in place. These bars will go from the main frame rail to the front down bars. The center of this bar will line up with the front motor plate and will be 90 degrees to the ground going up to the front down bars. The placement of these bars is very important. They must be square to the chassis centerline.

49...Cut and fit the main door bars (#17) to go 1" from the bottom of the window bars to the main hoop. This bar must meet the main hoop so that when the funny car cage seat back bar goes in at the same angle of the door bar it will be level to 4" below your shoulders when sitting in the car.The best way to figure this out is to use a piece of string to mark the bar center.

50...Run the secondary door bars from the bottom of the main hoop to the window bars even with the front down bars. Measure, cut and notch one of the secondary door bars (#18) to fit on the top half and bottom half of the door X. Use a string to help line both of these up. Tack weld each bar in place. Repeat this on the other side of the car.

51...Cut and fit the upper midplate cross bar (#19). This bar will mount to the dash bar and go down to the midplate. Center it on the dash bar and rotate it to meet the midplate. Tack weld in place.

52..The midplate crossbar supports (#20) go from the crossbar to the window bars on each side. Cut and fit one of the crossbar support to go from the bend in the crossbar to the window bar 3" from the bottom. Tack weld in place when fit. Repeat this on the other side so both of them are the same.

53...The lower midplate supports (#21) will be fit to go from the frame rails even with the rear of the block to the bottom of the window bars. tack weld each bar in place when fit.

54...The two four link mounting uprights (#22) will go on the rear crossmember even with the frame rails. (22" outside to outside) Fit and notch these bar so that they are 90 degrees front to back and side to side. Notch both ends of each bar so that the crossbar that goes on top will be level when installed. Put one small tack on the back side of each bar when fit.

55...The upper four link support on the passenger side (#23) will be the next bar to be installed. Cut and notch this bar so the start of the bend is even with the out side of the passenger side four link mounting upright when the one end is notched to fit on the main hoop. When this is done mark and cut the other end of the bar even with the outside of the driver's side four link mounting upright at a 5 degree angle from the bottom to the top towards the center of the car. Tack weld in place when fit.

56...Bar (#24) the passenger side four link diagonal needs to be cut and fit to go from the top of the four link mounting upright to the bottom of the main hoop. Tack weld in place when fit.

57...The driver's side upper four link support (#25) will go from the bottom of the main hoop up to the end of the passenger side upper four link support. Cut and fit the short end of the bar so the long end will be square with the center section of the passenger side upper four link support. Take your time when fitting the end that goes toward the center of the car. This bar must fit the the end of the other bar and not have any gaps in order to weld it. Tack weld this bar in place when fit.

58...The two drive shaft loop uprights (#26) will go in next. Stand the carpenters square on the chassis centerline on mark the center of the four link crossmember. Measure each way from this line 3" and mark. Cut and install each upright with the outside of the tube even with the lines. Each one must be 90 degrees to the lower four link crossmember (4" Inside to inside).Tack weld in place.

59...The seat back bar for the funny car cage (#27) will be notched so it will follow the angle of the main door bar. The back of this bar must be at least 6" to 7" from the main hoop and 90 degrees to the chassis centerline. Tack weld this bar in place for now. it will have to be removed later to notch the inside of this bar.

60...The front passenger side funny car cage bar (#28) will be the next one to be fit. Measure forward from the main hoop 10" on the driver's side and mark the top hoop.The back side of bar (#28) will line up with this mark. Notch the top of the bar so when the top is level the side of the bar is against the outside of the funny car cage seat back bar. Once this is done cut and fit the bottom of this bar a little at a time to fit the crossbar above the four link mounting uprights. (Remember the top of this bar must be level! and the side must be against the outside of the seat back bar!). Mark the bottom crossmember where the bar meets it. with a magic marker on the driver's side of this bar. Remove the funny car cage seat back bar to finish notching this bar. Notch the top of this bar a little at a time so that the bottom of the bar moves over the width of the bar.

The line on the bottom crossmember should be on the passenger side of the bar now. Tack weld in place when fit.

61...Cut and finish notching the passenger side of the funny car cage seat back bar.(#27) to fit the funny car cage front side bar that is tack welded in place. If for any reason this bar will not meet the funny car cage side bar the tack on the bottom will have to be cut and the bar moved. Tack weld both of these bars in place when fit and level.

62...The inside rear funny car cage bar (#29) will be notched to go from the inside of the main hoop to the funny car cage seat back bar. This bar must be in line with the main hoop from the side and at the same angle as the front inside funny car cage bar. (When you look from the side this bar should be in line with the main hoop.) Tack weld in place when fit.

63...Bar (#30) the front outside funny car cage bar will have to be cut and notched to go from the top hoop to the main door bar. Notch the top of this bar so it lines up with the front inside funny car cage bar (#28) and meets the main door bar so it is at the same angle as the main hoop looking from the side. Check for any interference with the door before tack welding in place.

64...The funny car cage rear support bars (#31) will be the next bars to install. They will go from the main hoop to the funny car cage seat back bar. Find the center of the funny car cage seat back bar and mark it 2-1/2" each way from center. Cut the short end of these bars off 1-1/2" in front of where the bend starts and notch these bars to fit on the main hoop. Cut the bottom of these bars 1" longer than they need to be and notch a little at a time until they fit on the funny car cage seat back bar with the inside of each bar lined up with the marks. (5" between the bars at the bottom and the top.). Tack weld each bar in place when they are square to the seat back bar and main hoop.

65...Install the top funny car cage support bars (#32) between the main hoop and the front funny car cage bar. These bars must be in line with the rear funny car cage support bars. Tack weld each one in place.

66...Cut and fit bar (#33) the front funny car cage support bar to go from the main hoop just above the secondary door bar to the bottom side of the main door bar right under the front outside funny car cage bar. Tack weld in place when fit.

67...The lower seat back bar (#34) will be installed next. Measure from the funny car cage seat back bar (#27) down the main hoop to the upper four link support (#25). Mark the main hoop at half this distance. This will

be where the center of the lower seat back bar will meet the main hoop. Cut and fit this bar to go from the mark made on the main hoop to the upper four link support bar (#25) where it meets the four link mounting upright. (#22) This bar should be the same as the lower bar looking down from the top. When this bar is fit go ahead and tack weld it in place.

68...The seat back support bars (#35-#36) will go in next. Fit the inside bar (#35) to go from the funny car cage seat back bar just under the inside rear cage support to the upper four link support above the four link mounting upright. The other side (#36) will be in two pieces. This bar will be mounted at the opposite angle as the other side but must go to the upper bar than down to the lower bar. When you have these two bar in line go ahead and tack weld them in place along with the other bar.

The front half of the chassis is now 95% complete. Go back and check all of the bars installed up to this point. Check all the measurements and make sure that they are level and square.

The rear frame rail width of the chassis is 22" to the outside. Check the tire to tire measurement taken before starting the installation . For this frame width the tire to tire measurement needs to be 25" or wider. If your measurement is smaller than this the rear frame width will have to be made narrowed. 1-1/2" of tire clearance is recommended on each tire to the frame.

The four link kit is highly recommended to complete the installation of the back half of the chassis. You can skip to step #76 but you will not be able to check any clearances on the rear end housing of four link.

69...Bolt two rod ends between each set of front four link brackets using the bolt and no-locking nuts for set up supplied in the kit. Tack weld the end of each bracket to the four link mounting uprights so they are square with the chassis centerline and the center of the bottom holes are 6.875 from the ground. (Remove the rod ends after tacking the brackets in place.)

70...Drill a 1/4" hole all the way through one end of each four link bar 3/4" from the end. Tack weld the left hand tube adapters into this end of each tube. Screw the left handed rod ends into each of these bar half way.

71...Screw the rest of the rod ends into the right handed tube adapters half way. Slide these tube adapters into the tubes and measure from center to center on the rod ends. This kit calls for 23" center to center. What ever the bars measure over 23" need to be cut off the tube.

72...After the bars are cut to size drill a 1/4" hole all the way through the end of each tube 3/4" from the end. Tack weld the tube adapters in the end of the tubes.

73...Adjust the rod ends so all of the tubes are the same length. (This is very important)

74...Install the four link brackets on the rear end housing so the bottom holes are 90 degrees to the ground and the brackets are at the same width as the front brackets. The pinion should be center between the bracket and at 3 degrees down. Put a small tack on each bracket to hold it in place.

75.... Set the rear end under the car at the correct height lined up with the rear axle centerline. Install the four link bars in the holes shown in the set up sheet. Check the width of the housing brackets, the pinion angle and the pinion offset once the rear is centered at the correct height. If everything checks out go ahead and weld the brackets a little more.

76...Cut and notch the long end of the rear frame rails (#37) so the center of the bend is 18" from the back of the four link mounting uprights when the bottom of the bar is 28" off the ground at 7" behind the center of the rear end housing. Mark this bar at 7" from the center of the rear end housing and notch it to except the shock crossmember. Notch the other frame rail to match the first one.

77...Clamp these bars to the bench at 22" to the outside (Or the width needed). Clamp them the same way they will be going into the car. Tack weld the shock crossmember (#38) to the frame rails after cut to length.(The width of the frame rails). The crossmember must be square.

78...Mount the rear frame rail assembly to the upper four link crossmember. The bottom of the frame rails will have to be notched for the four link mounting uprights. Use a jack stand to hold the rails at 28" to the bottom of the crossmember. Tack weld in place when square and level. Use a plumb bob from the center of the shock crossmember to the chassis centerline

79...Notch one end of each frame rail upright (#39) To fit the frame rails over the bend

80...The rear support loop from the main hoop (#40) and the frame rail uprights (#39) will have to be fit at the same time. Cut and notch the sup port loop to fit on the main hoop on the passenger side and the back of the funny car cage seat back bar on the driver's side. Notch this bar so it

is centered over the rear frame rails and measures 12" to the top from top of the rear frame rails. (This bar may have to be lower on some cars so the rear frame support bars (#48) will clear the bottom of the rear window) Finish notching the uprights to go from the frame rails to the support loop. These bars need to be 90 degrees front to back and side to side. Before tack welding anything check that the support loop is level and the center of the bar between the bends lines up with the chassis centerline using the plumb bob. Tack weld all the pieces in place after everything is checked.

81...The support bars (#41) will go from the rear support loop to the main hoop. Notch one of the bars to fit on the rear support loop even with the upright and to fit the main hoop just inside the outside rear funny car cage bar. Leave just enough room between them to weld. Drop the plumb bob down from the main hoop to the chassis centerline and mark the main hoop. Fit the other bar so it is the same distance from the center mark on the top. Tack weld both in place when fit.

82...Cut and notch the front supports (#42) for the uprights over the rear end. These bars will mount to the top of the uprights over the rear end where they meet the rear support loop down to the front of the rear frame rails where they meet the upper four link crossmember. Tack weld both in place when fit.

83...The rear frame crossmember (#43) needs to be cut and notched to go between the frame rails in line with the uprights that go to the rear support loop. Tack weld in place when fit.

84...Measure in towards the center of the car from the four link brackets 3" on each side and mark the lower four link crossmember (#1). Notch one end of the rear frame rail support bars (#44) so the outside edge of the bars line up with the marks made on the lower four link crossmember and the top of the bar meets the rear frame rails in the center of the bend. Tack weld both bars in place when fit.

85...Cut and notch the rear supports (#45) for the uprights over the rear end. These bars will mount to the top of the uprights over the rear end where they meet the rear support loop down to the rear of the rear frame rails where they meet the shock crossmember. Tack weld both in place when fit.

86...The rear frame rails (#46) will be the next bars to go in place. These bars will go from the shock crossmember to the rear of the car. The bars should be mounted as low as possible but high enough to have clearance over the wheelie bars and meet the back of the car. The rear part of the bar after the bend should be level to the ground for the battery mount. Cut and notch both ends of the bars the same length. Clamp the rear section of these bar to the work bench at 22" to the outside. Cut the rear crossmember (#47) to size (22")

and tack weld it to the two rear frame rails. Make sure the crossmember is centered and square. Once this is done tack weld the frame rail assembly to the shock crossmember at the correct height using jack stands to hold it level and at the height needed. (Shim with small pieces of wood to level) Drop the plumb bob down from the center of the rear crossmember to the chassis centerline. Notch the rear frame rails to adjust this so the rear crossmember lines up with the chassis centerline. Leave the jack stands under the rear frame to support them until the rear support bars are installed.

87...The rear frame rail support bars (#48) will be notched to go from the support loop from the back of the main hoop to the end of the rear frame rails where the crossmember mounts. Try to line the bends up with the bends on the lower frame rails if possible. When both ends are notched tack weld them in place with 22" to the outside.

88...Cut and notch the rear frame rail crossmember (#49) to fit between the rear frame rails (#46) even with the bends. Do not tack weld in place at this time.

89...Cut and notch each rear frame upright (#50) to go from the center of the bend on the rear frame support bars (#48) to the lower frame rails 90 degrees to the ground. Tack weld both bars in place when fit.

90...Bar (#51) the rear frame rail support crossmember will be notched to go between the rear frame rail support bars (#48) even with the frame rail uprights (#50) tack welded in place from the step before. Line the lower frame rail crossmember (#49) up with the uprights and tack weld both the top and bottom crossmembers in place making sure that both are level.

91...The diagonal support bar (#52) will be cut and notched to go between the rear frame rail uprights (#50) from the driver's side top to the passenger side bottom. (From corner to corner) Tack weld in place when fit.

92...The support bars (#53) for the rear frame rail uprights will be the next ones to be installed. Cut and notch one end to fit the top of the upright (#50) where it meets the rear frame rail support bars (#48) and the other end to fit the rear frame rails where they meet the shock crossmember (#38). Tack weld both bars in place when fit.

93...The front and rear diagonal bars (#54-#55) for the bottom of the rear frame rails will be the next bars to go in place. Cut and notch the rear bar (#54) to go from the driver's side rear of the frame rail to the front on the

passenger side. Notch the other bar (#55) to go from the driver's side front of the frame rails by the shock crossmember to the passenger side rear where the other bar meets the crossmember. Tack weld both in place when fit.

94...The transmission crossmember support bars (#56) will be next bars to install. Notch one end of these bars to fit on the transmission crossmember between the center floor X-Braces (#11) and the frame rails. Fit the other end to the upper four link support bar (#23) the same distance from the chassis center. Try to make them a wide as possible. Tack weld them in place. They can be moved later if there is a problem with clearance on the seat.

95...The last bars to go in the rear of the chassis are the front frame rail diagonals (#57). Use the plumb bob to mark the chassis centerline on the upper four link support bar (#23). Measure 2-1/2" each way from the chassis centerline and mark. Cut and notch one end of each bar so the inside edge of the bar line up with the lines made on the four link support bar. Fit the other end of the bar to fit the front center frame rails crossmember (#43) 3/4" in from the frame rails. Tack weld both of them in place when fit.

96...The bar marked (#58) will be used to make the front seat crossmember. Cut and notch this bar to go from the parallel support bar (#12) to the outside floor diagonal (#12) and than to the main frame rail. Use a string or straight edge to help line them up. Tack weld them in place when fit.

97...The four small bars (#59) will be used for roll bar gussets. Cut and notch two of the bars to go in the top corner of the cage from the main hoop to the top hoop on the outside. Tack weld one on each side of the chassis. Cut and notch the other two bars to go from the top hoop to the window bars on the windshield side. Tack weld both in place when fit.

98...The helmet bars (#60) will have to be cut and notch to go around the funny car cage to keep the helmet from going through the space between the bars. Cut each bar to go on one side of the cage. It will go from the front funny car cage bar to the main hoop then to the rear bars of the funny car cage. Repeat the same on the other side of the funny car cage. Tack weld in place when they are fit.

99...The top and bottom half of the rear drive shaft loop (#61) will be the next to install. It is best to have the motor, transmission, drive shaft and the rear end mounted in the car before installing the drive shaft loop U-bends. This is so you can check the clearance on the top and bottom of

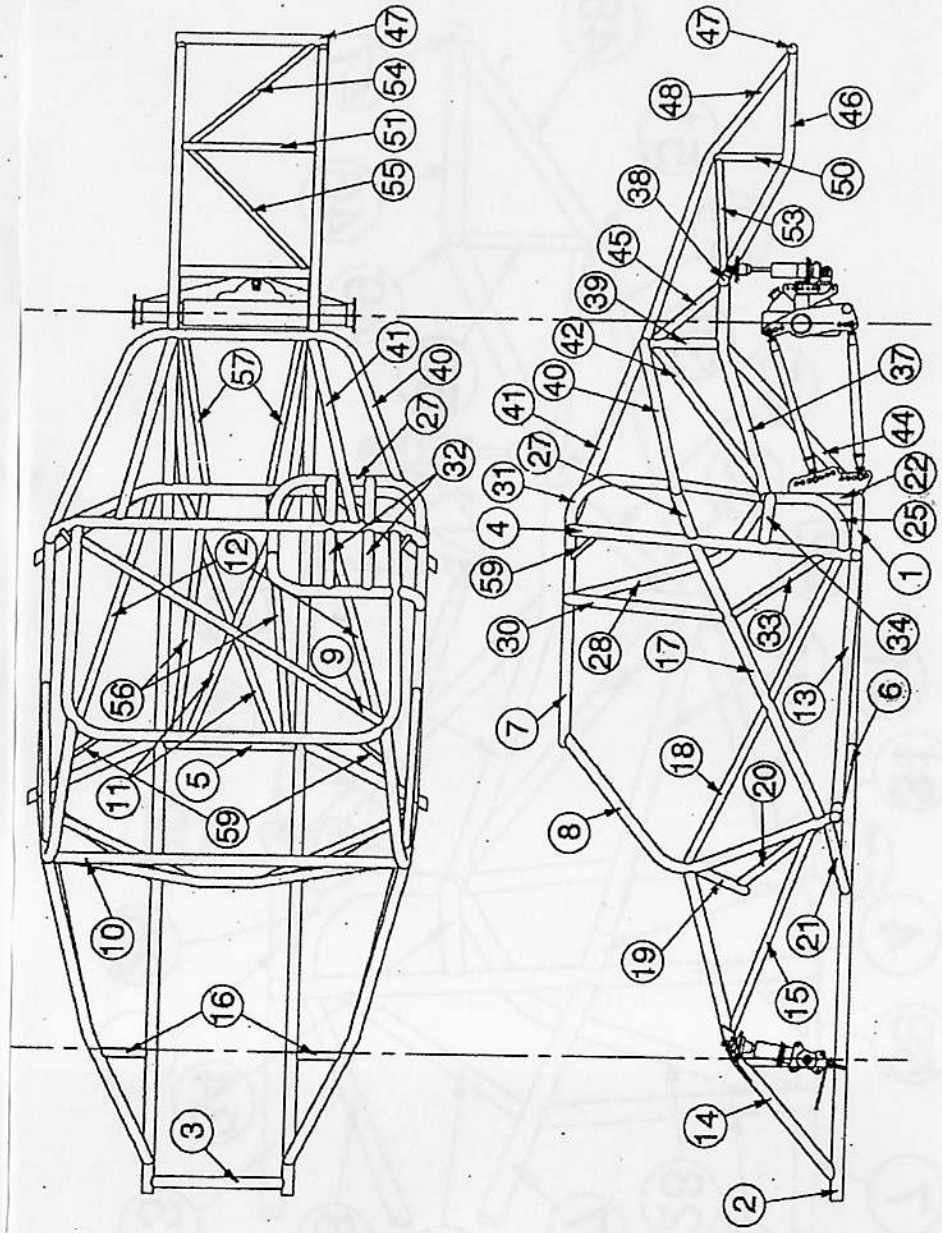
the drive shaft through out the suspension travel. If you are missing any of these components the U-bends can be installed at a later time.

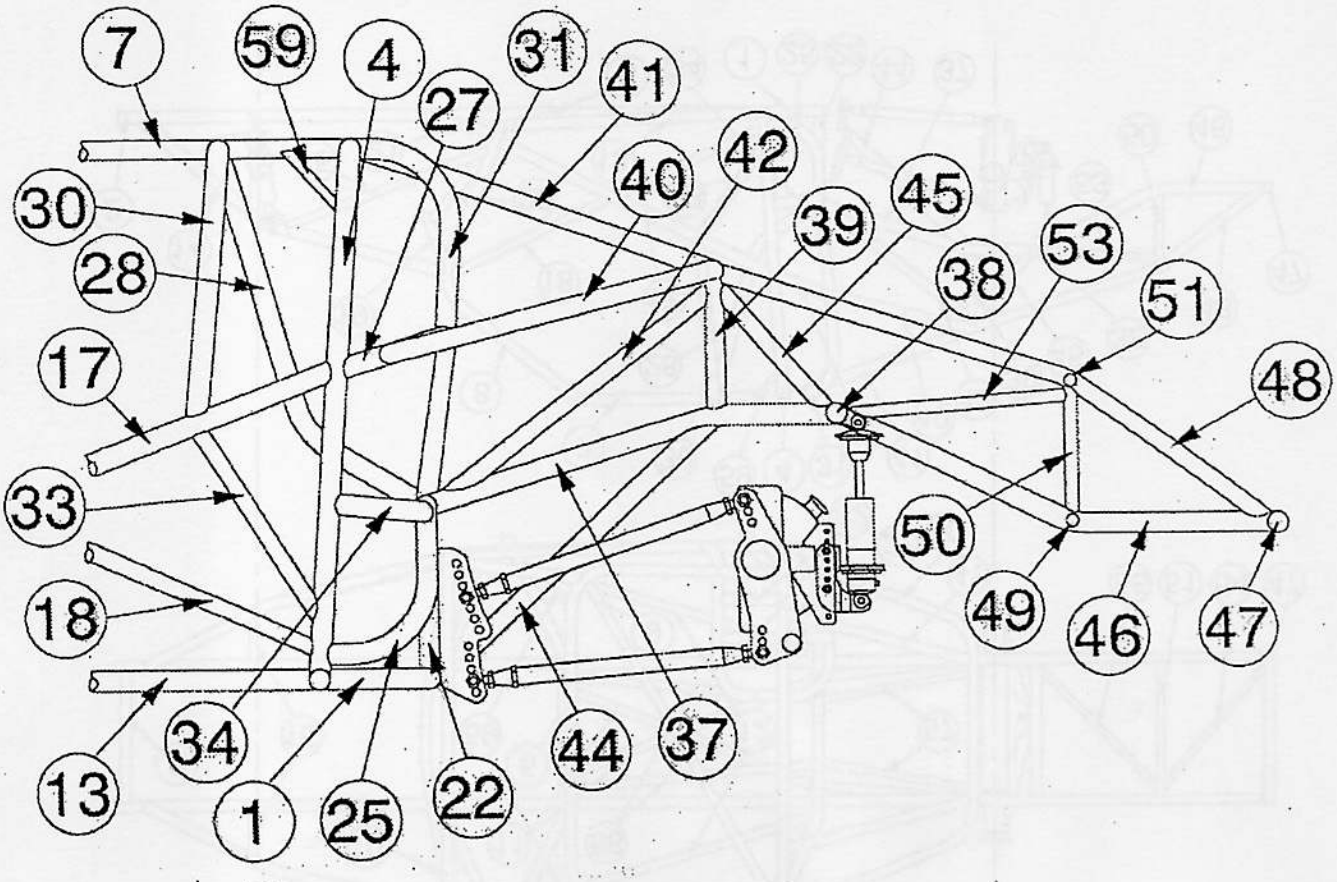
100...All the bars for the chassis are tack welded in place. Go back and check all of the dimensions of the back half of the car. Make sure all of the bars are level and square. If everything checks out go ahead and start welding the chassis up. (MIG welder for mild steel and TIG welder for chrome moly always but can be used on mild steel) Weld as much as you can on the chassis before removing the body from the chassis so the tops of everything can be welded. Never weld a lot in one area on the chassis. Weld a little here then move some where else an weld some more. If you weld a lot in one area there is a good chance the chassis will move around and pull.

101...After the chassis is welded go ahead and mount the body back to the chassis. Mount the chassis back to the rocker panels and the rear of the car the same way it was before removing it to weld the chassis. Center the roof on the chassis and weld small pieces of tubing between the body and chassis to hold it in place. Some of the places that need bracing are thr front windshield posts, the top of the main hoop at the roof, just below the rear Quarter windows to the side of the main hoop and at the bottom of the rear window to the roll cage. After all of the aluminum is installed check to see if any more body braces will be needed.

Related components for the chassis:

Motor plates
Radiator and Mount
Pedal Kits
Parachute Release
Window Frame Kit
Door Hinge Kit
Wheel Tubs
Parachute Mount
Battery Mount
Dzus Components
Transmission Mount
Steering Column Kit
Window Nets and Mount
Drive Shaft Loop Kits
Door Latch Kit
Window Installation Kits
Fuel Cell and Mount
Wheelie Bars
Weight Bars

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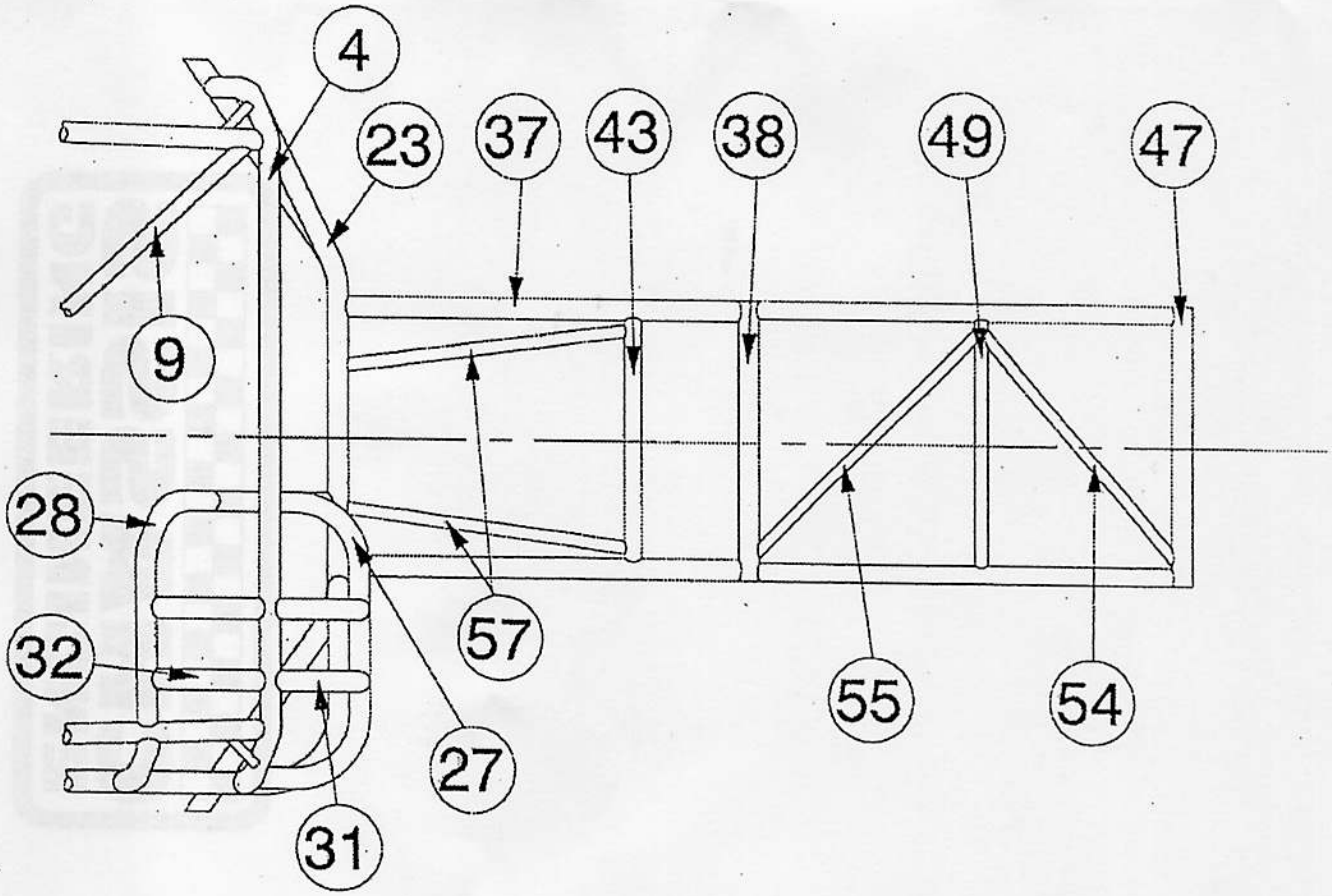
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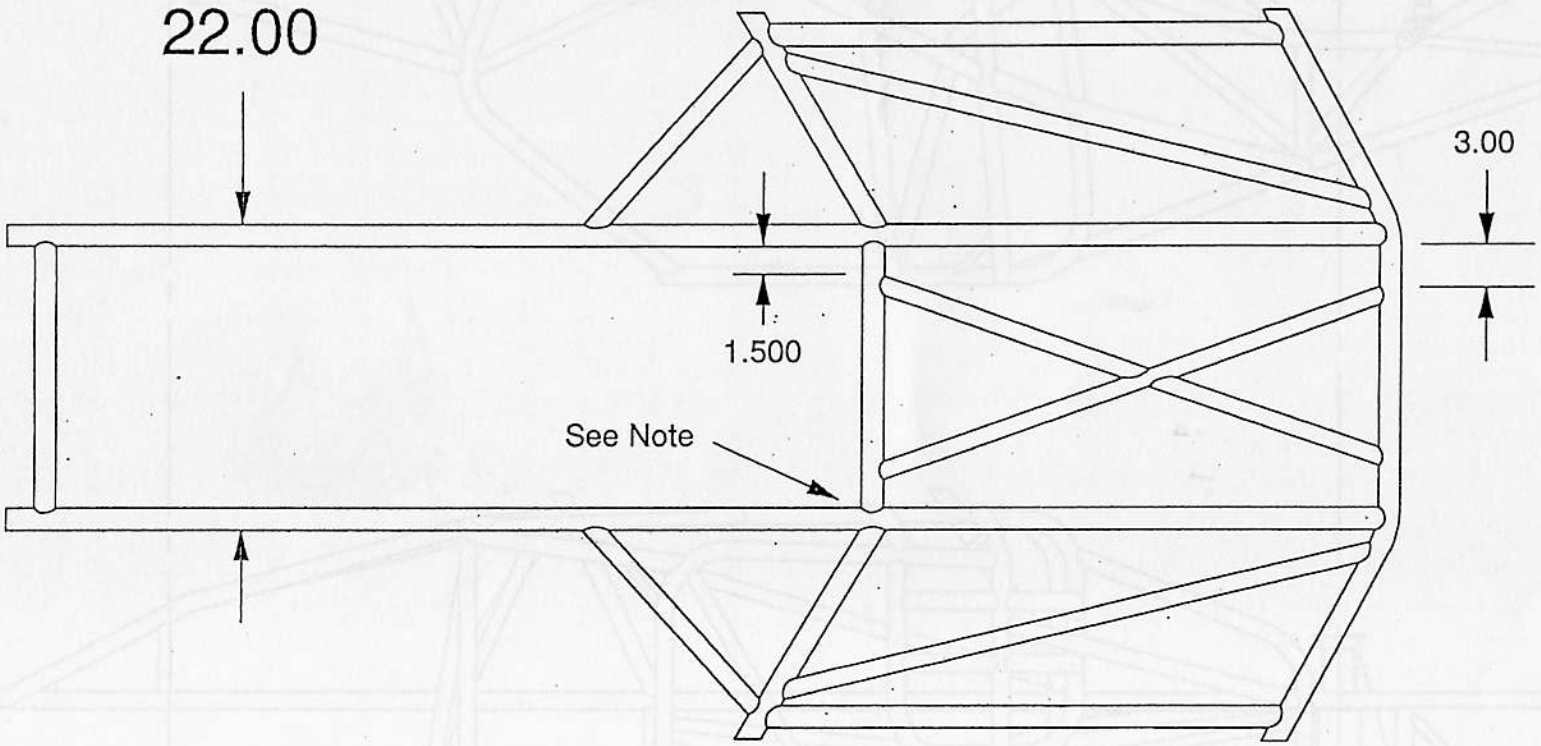

NOTE:

If you plan to have the chassis meet the SFI chassis certification 25.1C the transmision crossmember and the window bar outriggers must line up with each other. If you are not going for the certification of 25.1C these bar do not have to meet one another.