

# **Limited Weld 80's and Old Iron Rules**

## **General Rules**

- 1. All glass, plastic and pot metal must be removed.**
- 2. Nothing may remain in the bottoms of the trunk or doors.**
- 3. All outer hardware must be removed – door handles, mirrors, chrome, moldings, screws, fiberglass, etc.**
- 4. No added weight to any car.**
- 5. Rear seats in all cars and all decking in station wagons must be removed.**
- 6. Front seat must be securely bolted to the floor; however, these bolts may NOT go through the frame.**
- 7. You must have a functioning seat belt.**
- 8. All flammable materials must be removed from the inside of the vehicle other than safety padding and the driver's seat.**
- 9. Brakes must be functional.**
- 10. Vehicles may have a roof sign, minimum 15"x15," maximum 24"x24" contrasting colors, but may not be positioned in such a way to strengthen the car.**
- 11. No '73 or older imperials or imperial sub frames, ambulances, hearses, carryalls or limousines allowed, no 1970 and older Lincolns.**

## **ENGINES, TRANSMISSIONS, AND COMPONENTS.**

- 1. Engine cross breeding is allowed.**
- 2. No engine oil coolers allowed.**
- 3. Head straps may be placed one on each corner of the engine if running without cradle, or if you are running a lower cradle, just 2 straps in front, 1 per side will be allowed. Head straps must be no larger than 2"x1/2" material. It can be bolted to head and welded to the frame 3 inches max top side only.**
- 4. Cannot use firewall as a brace to stop car from bending**
- 5. All cars must use stock engine cradles for the year of the car**
- 6. Engine cradles are allowed only with firewall cut out 1 inch larger for protector to be able to pass through cannot be used to strengthen car.**

**Distributor cap protector CAN NOT come in contact with cage, window bars, dash straps, or hood pins.**

**7. Ultra bells and mid-plates can be used if not deemed to reinforce body or frame in any manor or you will be cutting sheet metal or mid-plate.**

**8. If a transmission brace is run, the trans tunnel must have slits 2 inches apart length of tranny brace**

**9. If a transmission brace is run you CAN NOT lock the trans in tight must have a minimum of 2 inches of play**

**10. You may use 2"x2"x1/4"thick 6"long angle iron to mount cross member on can be welded to frame and crossmember.**

**11. Cross-member can constructed of 2" x 2" 1/4" max. thickness square tubing or any STOCK crossmember, cannot be reinforced internally**

**12. If a Transmission brace is not being used, the tail shaft can be secured with a 3/4" bolt and 1/2" thick mount**

**13. Hot wire switches may be run for the starter and ignition. Must have an air cleaner at the start of the event over the carburetor or air intake**

#### **Radiators**

**1. Radi-barrels are not allowed.**

**2. Radiator must be in stock position in front of the motor.**

**3. Radiator supports must remain in stock positions.**

**4. Radiator should contain water only. NO anti-freeze allowed.**

**5. You cannot have any kickers from the core support to the frame.**

**6. NO radiator protectors will be allowed of any kind.**

#### **FUEL AND FUEL DELIVERY SYSTEMS**

**1. Marine tank or metal fuel tank will be allowed. No plastic tanks allowed.**

**2. Original gas tanks must be removed from car.**

**3. You must have the gas tank securely mounted behind the driver's seat and it must be covered. Bolt may not go through the frame.**

**4. Fuel lines must run inside the car, not under the car along frame.**

**5. Electric fuel pumps are allowed. They must be covered and have an on/off switch near the steering wheel and clearly marked in large letters.**

## **TIRES AND BRAKES**

- 1. No studded or 100% steel wheels.**
- 2. Valve stem protectors are allowed but may not stick out of the rim.**
- 3. Wheel weights must be removed.**
- 4. Any tire allowed. Double stuffing is allowed. You can foam fill your tires only, no concrete.**
- 5. Homemade rims are acceptable. Bead locks and guards are ok. Split rims must be welded at least 4 places around the rim with a 4" long bead in each spot.**
- 6. Brake systems must be operational.**

## **-BATTERIES**

- 1. Battery must be moved to passenger front seat area and securely mounted and covered. They may not be attached to the frame in any way.**
- 2. A maximum of two (2), 12-volt batteries may be used.**

## **BUMPERS**

- 1. Bumpers are interchangeable. Any automotive car bumper may be used on the front or the rear of the vehicle. Bumpers can be stuffed, but metal must stay inside stock automotive style bumper chrome without changing angles in any way. No Sharp edges.**
- 2. Bumper may not be welded to the body at any time.**
- 3. You may weld the bumper brackets or shocks to the frame. You may not weld or attach anything further back than 6" behind the core support to the frame unless the factory mounts for that make, model, and year of car go farther than that. Must use factory equipment for that model in factory place.**
- 4. You may use a 5"x 20"x 1/4" maximum strap instead of bumper brackets or shocks, but not both.**
- 5. Bumper holes can be welded shut.**
- 6. You may weld the bumper to the frame with no extra metal unless specified in class rules.**
- 7. Bumpers may also be bolted or chained on.**

- 8. Bumpers maybe cut to keep them out of the tires but no sharp points.**
- 9. Bumpers may be installed upside down.**
- 10. Maximum bumper height is 28" to the top of the bumper**
- 11. Chrysler "Y" frame cars will be allowed to weld a 5"x9"x 1/4" plate on the top or bottom of the "Y" opening. No bumper brackets will be allowed if the plate is used. Or can collapse y and weld top seam only and use bracket rule.**

#### **CAGES, DOOR BARS AND HALO**

- 1. 1 Bar down to floor per side. Bar must connect to sheet metal only. No cage components may attach to or conceal a body mount. No angling forward, or kickers.**
- 2. You may use channel iron or tubing up to 6" diameter for your cage component (door bars, seat bars and dash bars).**
- 3. Door bars must be 6" from the fire wall at the center, and end 6" in front of the rear wheel house.**
- 4. Dash bar may have 8"x 8" x 1/4" plates on the ends to weld it in place. Plates may not attach to the firewall.**
- 5. Rear seat bars are mandatory and can be attached to 12"x12"x 1/4" end plates. Bars may be welded or bolted in.**
- 6. Halo can only be attached to the seat bar.**
- 7. No parts of the cage go outside driver's compartment, other than halo bar.**
- 8. Seat bar may be no further than twelve (12") behind the driver's seat. You are allowed one angled bar off of your seat bar to the floor sheet metal only that runs across the car from driver's side to passenger side.**
- 9. No kickers, angled or otherwise.**
- 10. All horizontal cage bars must be at least 12" off the floor of the car, measured at the body bolt elevation.**
- 11. All cage components must be in the interior of the car, not inside the door structure with the exception of the driver's door. This door bar may be inside the door to allow more room for driver's safety.**
- 12. Gas tank protectors are allowed. They may not be more than 24" wide and centered in the car. It cannot be attached to rear seat pan/divider. It cannot be attached to door bars. It can be attached to seat bar and angle**

**back from there. 3" tubing maximum. Must have 1" clearance between gas tank protector and floor sheet metal. No pounding sheet metal.**

**13. You may add a halo bar. Six inch (6") diameter maximum.**

**14. Halo bars must be in a direct vertical line and no farther than twelve (12") behind the rear of the driver's seat.**

**15. Halo bar must be in the interior of the car. The top of the halo bar may go over the top of the roof and be welded or bolted to the roof sheet metal in two (2) spots. Five inch (5") long welds allowed for this and 1/2" bolts max.**

**16. Your halo must attach to your back seat bar or to your door bars.**

### **TRUNKS**

**1. May have Two (2) one-inch (1") pins can either be welded vertically along the frame or bolted through the frame. Pins must run vertical all the way through the trunk lid with maximum 6x6x1/4" free-floating washers**

**2. Trunks may be welded 5 on 5 off with 3"x1/4" flat strap or 3"x3"x5" long angle iron welded to sheet metal with 2 3/8" bolts per angle iron with the 5 on 5 off rule or unlimited chain or wire to sheet metal only.**

**3. Trunks may be tucked but no pre-bending of sheet metal will be allowed besides this.**

**4. You can V your trunk lid and speaker deck down no more than 6 inches from stock location.**

**5. Chains and wires may not be dragging.**

### **HOODS**

**1. Six (6) hold-downs are allowed on the hood in any combination with no more than 2 to the frame**

**a) two (2) one-inch (1") pins are either welded down vertically to the side of the frame OR through the frame, A-arms forward with max 6"x6"x1/4" washers, not welded (floating).**

**b) May weld 3"x3" 1/4" thick 3" long to sheet metal and weld maximum 1" bolt to angle and use 6"x6" 1/4" thick free floating plates.**

**c) Angle iron no more than 3"x3" 4" long x1/4" thick welded to sheet metal only with 3/8" maximum bolt.**

**d) #9-Wire – two loops sheet metal to sheet metal.**

**e) Chain 3/8" inch max sheet metal to sheet metal**

**2. You must have at least two (2) 10" holes for fire access.**

**3. Chains and wires may not be dragging.**

### **DOORS**

**1. Doors may be chained, wired or welded shut. 2 chains or wire loops per seam or welded 5" on 5" off with 2" wide by 1/4" straps. Straps may not go to frame. Chains and wire may go around frame, not cage components.**

**2. Driver's door may be welded solid.**

**3. Driver's door plate recommended maximum 24" wide welded across driver's not to exceed three inches (3") past front and rear seams.**

**4. Tailgates on wagons and hatchbacks maybe welded 5"on-5" off with 2" wide by 1/4" thick steel. These plates may not be welded to the bumper or frame.**

**5. Only one wire or chain may go around the frame.**

**6. NO wire or chain may go from the door to the top of the frame.**

### **WINDOWS**

**1. Driver's side may have window netting. Netting may go from the A pillar to the C pillar.**

**2. You must have a minimum of 1 bar or max of 2 bars, 3" maximum, chain or wire running from the roof to the Firewall in the windshield area for driver's protection. May not attach to the cage in any way. 77. You may have two bars in rear window up to 2"x2" square running four inches (4") past the window jamb top and bottom. Components must remain at least 6 inches from Distributor protector at all times.**

### **SUSPENSION and STEERING**

**1. No suspension modifications will be allowed other upper a-arms may be pinned through center of arm, chained, or welded down to get your bumper height. (Welding)- 2 straps, 3 inches wide max, 1/4" thick, welded 2" on frame and 2" welded on upper a-arm vertically. Also, you may modify rear end control arms, but must start as factory set.**

**2. 1998 and newer Ford products may convert to standard 4 link system in two ways. 1) Completely replacing the package tray to that of a 4 link car, or 2) Using conversion (ZTR) brackets. No doubling package tray. No larger than 6"X8"X1/4" plates on upper mounts, and no larger than 6"x6"x1/4" on lower**

**mounts. Mounting plates with in factory location of OEM lower trailing are location.**

**3. Suspension components can be interchanged from car to car. Stock OEM parts only. This includes A-arms, spindles, shocks, and other suspension parts. you may alter your steering column to prevent loss of steering, steering knuckles, homemade steering shafts (box to steering wheel)**

**4. Nine (9) automotive leaf springs are allowed maximum with a 2 ½” stagger. Four (4) leaf spring clamps per spring allowed.**

**5. Stock OEM automotive type steering and components only. Components can be interchanged. No homemade or custom spindles or ball joints. (moog direct bolt/ press-ins are allowed) No bracing or reinforcing steering components. No ball joint savers of any kind.**

**6. Welding of spider gears is allowed.**

**7. Use rear end of choice braced or unbraced, but must be no more than 8 lugs.**

## **FRAMES**

**1. No shortening of frame rails past stock location of the core support mounts.**

**2. You may chain or wire your axle around the frame rail, but do not bolt this chain through the frame. You may not use any strapping of any kind. 3/8” chain maximum. You may not weld the chain links together to create a bar effect. Uni-body cars may use 1 bolt per side for this to bolt through the uni-body. Do not weld the bolt or any washers to the uni-body. 3”x 3”x ¼” washers will be allowed.**

**3. Frame seams may be welded from in front of the front A-arm mount forward with a ½” wide bead only.**

**4. 3-5x5x ¼” plate will be allowed per frame rail -- outside of frame rail on used cars only. If the frame is plated without a visible kink, the plate(s) will be cut off completely.**

**5. You may re-stub your frames either just in front of the front A-arm mount or at the transmission cross- member location. This must be a butt weld only, no over lapping allowed. ½” wide bead allowed.**

**6. NO stuffing, heat treating or foam filling of frames is allowed. All factory holes must be present.**

- 7. 80's and Newer Fords, Lincolns, and Mercury only may cut crush box flap to tilt, and then re-weld front flap only. No more than 1 inch from stock location of flap. No other seam welding on crush boxes.**
- 8. 80's Gm's cold bend at location of choice.**
- 9. No cold bending, pitching, tilting of non 80's cars**
- 10. 2003 and newer fords must run stock aluminum cradle and suspension.**
- 11. Chrysler "Y" frame cars will be allowed to weld a 5"x9"x 1/4" plate on the top or bottom of the "Y" opening. No bumper brackets will be allowed if the plate is used. Or can collapse y and weld top seam only and use bracket rule.**
- 12. 80s only: you are allowed a 1/4" thick by 22" long hump plate, this must follow the contour of the hump centered and welded with one pass of 1/4" weld. This plate must be welded to the outside only no plug welding is allowed, must match the factory hump and not span the center of the hump. Do not weld any seams on the rear of the car!**

## **BODY**

- 1. Pounding, shaping, and creasing of sheet metal is allowed. No doubling affect, and must remain within 6 inches from stock.**
- 2. May have 4 locations of 4 strands of 9 wire any were in car except for in front windshield opening. Can go around frame or sheet metal only. NOT around any cage components.**
- 3. Floor sheet metal maybe patched where components will be mounted or for driver's protection. Sheet metal only. NO other patching is allowed unless it's a safety issue. Call first. You must leave the rusty floors in place. DO NOT cut them out.**
- 4. Body mount bolts can be changed. 1" maximum diameter maximum. These can only go through one layer of frame. All body mount holes must be open. Must have a 3/4" minimum body bolt spacer, 2" maximum spacer. No larger than 3"x3"x1/4" plates on body mount bolts. No more than 8 inch spacer on core support.**
- 5. You may not add any extra body bolts.**
- 6. Wheel opening may be trimmed for tire clearance. No sharp edges.**



- 7. 6 wheel well or fender bolts will be allowed. No further than 5 inches from stock wheel well opening.**
- 8. No doubling of body panels allowed, no added metal allowed.**
- 9. NO body seam welding allowed except for the exterior of the doors.**
- 10. Holes may be cut in floor and firewall to accommodate the shifter, fuel lines and transmission lines.**

**Call Deryk Evens at 641-832-0520 with questions**

**If the rules don't say you can do it don't assume you can call first.**

## **Limited Weld Truck Rules**

**1/2 and 3/4 ton truck and suburbans will be allowed in this class.**

### **General Rules**

- 1. All glass, plastic and pot metal must be removed.**
- 2. Nothing may remain in the bottoms of the trunk or doors.**
- 3. All outer hardware must be removed – door handles, mirrors, chrome, moldings, screws, fiberglass, etc.**
- 4. No added weight to any car.**
- 5. Rear seats in all vehicles and all decking in station wagons must be removed.**
- 6. Front seat must be securely bolted to the floor; however, these bolts may NOT go through the frame.**
- 7. You must have a functioning seat belt.**
- 8. All flammable materials must be removed from the inside of the vehicle other than safety padding and the driver's seat.**

**9. Brakes must be functional.**

**10. Vehicles may have a roof sign, minimum 15"x15," maximum 24"x24" contrasting colors, but may not be positioned in such a way to strengthen the car.**

### **Engines**

**1. Engine cross breeding is allowed.**

**2. You may have solid motor mounts that can be welded, bolted or chained to the engine cross member, Not to the frame rails.**

**3. You may brace front of motor to the frame rail with 1"x 1/2" flat steel or 3/8" chain. No angling forward or backwards.**

**4. You must start with an air cleaner over the air intake.**

**5. No skid plates, distributor protectors, transmission bracing, engine oil coolers.**

**6. No radi barrels**

**7. Stock radiator in stock location or may loop lines with small piece of steel pipe. May use seatbelts or ratchet straps to hold radiator in place.**

**8. May run lower block saver with no pulley protector**

**9. May run carb protector if not strengthening truck attached to motor only. Judges decision is final.**

### **Transmissions**

**1. Transmission coolers are allowed, but must be secured in a way to prevent injury. Coolers may not be attached to the frame in any way.**

**2. Transmissions may be from a car or truck origin.**

**3. 4-wheel drives must remove one drive shaft.**

**4. Any drive shaft may be used sliders ok**

### **Frames**

**1. There will be no plating, boxing, doubling or adding of any cross members to the frame unless the rules say you can.**

**2. If frame is badly bent you may plate one side with one 3"x 5"x 1/4" plate. Limit 2 plates per rail. With 2" gap between plates.**

**3. Call with other questions**

### **Fuel Systems**

**1. The gas tank must be securely mounted in the front of the box.**

**2. Marine tank or metal fuel tank will be allowed. No plastic tanks allowed.**

**3. You must have the gas tank securely mounted and it must be covered. Bolt may not go through the frame.**

**4. Fuel lines must run inside the truck.**

**5. Electric fuel pumps are allowed. They must be covered and have an on/off switch near the steering wheel and clearly marked in large letters**

### **Doors, Tailgates and Body**

**1. Driver's door maybe welded solid.**

**2. May have drivers door only window net**

**3. All body bolts may be replaced with a maximum 1" bolts to the top lip of frame only do not pin frame. 8"x 8"x 1/4" free floating washers will be allowed for this.**

**4. Doors may be chained two locations per seam, or welded 24 inches of total weld outside only 2" by 1/4" strap. Chain or wire will count as 4" of weld. Duct tape 4" wide will count as 1 chain or wire. Inches of Duct tape count as inches of weld**

**5. Box can be bolted to the cab in 4 places with 8"x 8"x 1/4" plates that are free floating with 1" bolt max**

**6. May weld box to cab 5" on 5" off with 3"x 1/4" strap.**

**7. Box may have a total of 8 tie downs to top lip of frame or welded to side of the frame with 8"x 8"x 1/4" plates that are free floating with 1" bolt max**

**8. Tail-gate may be chained two locations per side and two locations on bottom of tail-gate to box or welded 12 inches with strapping no wider than 4" and 1/4" thick can-not be welded to bumper or frame or body mount plates, box sheet metal only. Tail-gate may be lowered if not using a rear bumper, if using rear bumper you may drop tail gate to top of bumper no welding tailgate to bumper.**

**9. You may have a door plate on the outside of the driver's side door that may not exceed 24"x1" and cannot extend more than 3" past door seams.**

**10. Wheel well openings may be cut for clearance and may be bolted together with a maximum of 6 3/8" bolts.**

**11. No wedging of the box.**

#### **Cages and Halos**

**1. Safety is a big concern in this class so make the inside of you cab safe. A dash bar, behind the seat bar and door bars are Mandatory. Maximum 6" tubing or channel iron may be used for these.**

**2. You may have 4 down bars connecting your cage to the floor sheet metal. They can be a maximum 6". They cannot extend past the fire wall or behind the back of the cab.**

**3. No bars are allowed to attach to the firewall in any way.**

**4. You may also run a halo bar directly behind the cab. Maximum 6" diameter. It may be bolted to the cab in 6 spots with 1" bolt max. It can be bolted to the bed floor and may not be bolted or welded to the frame.**

**5. Kickers from your halo cannot be more than 24" from halo bar and must be bolted or welded only to bed of truck not to the frame and no wider than the factory frame at the box and no wider than top of cab on top.**

**6. MUST have two window bars no larger than 1 1/2 in diameter or 2 #9 wires in windshield opening to prevent hood from entering drivers compartment for drivers safety.**

#### **Leaf Springs and suspension**

**1. Stock OEM leaf pack for that truck in stock location.**

**2. 6 leaf spring clamps will be allowed per leaf pack. Clamps can be 3"x1/4" and wide enough to get around the springs with 2, 3/8 bolts per clamp. No welding of leaf springs.**

**3. No front leaf conversions. May add spring spacers to sagging coil springs to gain height must still bounce.**

**3. May run one 3/8 chain per side from frame to axle tube on rear axel.**

**4. Bumper height max 27 inch to top, min. 22 inches front and rear**

#### **Bumpers**

**1. Bumpers from any mass produced vehicle may be used. Bumpers may be**

seam welded and loaded or 6" 3/8" thick tubing with factory chrome welded to it no wider than fenders. If you choose to use the tubing must remain flat.

2. Bumpers may be cut down but no sharp edges will be allowed.

3. No open frame rails.

4. Bumpers may be welded to frame with 2x2 inch wide 1/4 thick angle iron on all sides of frame or may use 4x4x1/4" flat plate on one side of frame.

5. No ag, dmi, or hd step bumpers

#### **Tires**

1. No studded or 100% steel wheels.

2. Valve stem protectors are allowed but may not stick out of the rim.

3. Wheel weights must be removed.

4. Any tire allowed. Double stuffing is allowed. You can solid fill your tires if you wish.

5. NO SPLIT RIMS Allowed.

6. Brake systems must be operational.

7. Small weld in centers no larger than 9 inch

8. No bead locks

#### **Hoods**

1 .Hood may be chained 3/8 chain, wired, or bolted in 6 separate locations

2. May use 2 pieces of 2x2x1/4" 4" long angle iron with max 1/2 " bolt welded to sheet metal only on hood and fender.

2. 2 of the 6 chains or wires may go from core support to bumper.

3. You will be allowed two 1" rods welded to frame directly butted up backside of core support for hood pin as 2 of you 6 hood tie downs.

4. May bolt each hood cut out with 4- 3/8" bolts per cut out

**Call Deryk Evens at 641-832-0520 with questions**

**If the rules don't say you can do it don't assume you can call first.**

## **Modified Truck Rules**

### **General Rules**

- 1. All glass, plastic and pot metal must be removed.**
- 2. Nothing may remain in the bottoms of the trunk or doors.**
- 3. All outer hardware must be removed – door handles, mirrors, chrome, moldings, screws, fiberglass, etc.**
- 4. No added weight to any car.**
- 5. Rear seats in all cars and all decking in station wagons must be removed.**
- 6. Front seat must be securely bolted to the floor; however, these bolts may NOT go through the frame.**
- 7. You must have a functioning seat belt.**
- 8. All flammable materials must be removed from the inside of the vehicle other than safety padding and the driver's seat.**
- 9. Brakes must be functional.**
- 10. Vehicles may have a roof sign, minimum 15"x15," maximum 24"x24" contrasting colors, but may not be positioned in such a way to strengthen the car.**

### **Frames**

- 1. Any frame up to 1 ton truck and suburban will be allowed in this class.**
- 2. Any pre 1970 truck frame must be under 7 ½" in height**
- 3. There will be no plating, boxing, doubling or adding of any cross members to the frame unless the rules say you can.**
- 4. You are allowed a 1/4" plate 1 inches past the bend REPAIRS ONLY on one side of frame on your truck. You may box the frame but must have a 2" gap between plates.**
- 5. Any plating done other than rules allow will be cut. NO QUESTIONS ASKED!!**

## **Engines**

- 1. No engine oil coolers allowed.**
- 2. Must have an air cleaner at the start of the event over the carburetor.**
- 3. No water pump guards of any kind will be allowed**
- 4. You are allowed to add up to 12 inch wide factory OEM engine cradle to frames that didn't come with one from the factory. Using minimal added material to fasten the cross member.**
- 4. Distributor protectors are allowed must be attached to engine or transmission only. Backside no wider than 12" and must be at least 6" from dash bar at the start of the event with nothing between them except the firewall. It may not be welded, bolted or connected to body, hood, or frame. Forward supports must be inside normally positioned headers and must be behind water pump.**
- 5. Engine braces cannot be connected to the cage or dash bars in any way.**
- 6. You may also have 4 extra motor mounts that go to the frame, one off each corner of the motor. These braces may be 3" wide by 1/4" thick that are welded to the frame. You may also weld a 3"x3"x 1/4" plate to the frame. There must be a 2" gap between these braces and you cage braces. They may not be more than 6" in front of or behind the engine.**
- 7. May run engine cradles and trans braces.**

## **Radiators**

- 1. You may run a stock radiator or radi-barrel.**
- 2. Radi-barrel must have some sort of pressure release valve, or you will not run!**
- 3. Radi-barrels: No welding of radi-barrels to the truck at all! May be bolted in 6 spots to core support.**
- 4. You may use 1/4" max thickness material in front of radiator only (has to be mounted to the core support) The material can be 2" bigger than the radiator on all sides. May be bolted in 6 spots if using solid flat plate. If you are using wire mesh or expanded metal you may completely weld them in**
- 5. You can have a 3"x3" angle or square tube across your Radiator support with 2 kickers (3"x3") attached to the frame in front of the front axle to the top side of the frame only**

## **Transmissions**

- 1. Transmission coolers are allowed, but must be secured in a way to prevent injury. Coolers may not be attached to the frame in any way.**
- 2. Transmissions may be from a car or truck origin.**
- 3. 4-wheel drives must remove one drive shaft.**
- 4. Slider drive shafts ok**
- 5. Trans braces ok**

## **Fuel Systems**

- 1. Marine tank or metal fuel tank will be allowed. No plastic tanks allowed.**
- 2. You must have the gas tank securely mounted and it must be covered. Bolt may not go through the frame.**
- 3. Fuel lines must run inside the truck.**
- 4. Electric fuel pumps are allowed. They must be covered and have an on/off switch near the steering wheel and clearly marked in large letters**

## **Doors, Tailgates and Body**

- 1. Doors and tailgates may be welded shut with 4" wide by 1/4" thick flat steel inside and out. If you don't weld them, you must chain or 9 wire them shut in at least 3 places and a maximum of 6.**
- 2. Body creasing, enhancing of existing body lines and additional body lines will be allowed.**
- 3. Box can be bolted to the cab in 6 places with 4"x4"x 1/4" plates that are free floating with 1" bolt max. You can also weld the cab to the box using 4"x 1/4" flat steel.**
- 4. You may have a door plate on the outside of the driver's side door that may not exceed 24 inches tall and cannot extend more than 3" past door seams.**
- 5. If you choose to fold box sides over, it must be done behind rear wheels.**
- 6. You will be allowed to have 6 hood bolts welded vertically to the frame with no pig tails that are 1" max with 6"x6"x1/4" free floating washers. OR you can use 2 pieces of angle iron that is 3"x3"x4" bolted together with a maximum 1" bolt in 6 places on the hood and fenders.**
- 7. All factory seams in the box only can be welded with 2"x2"x1/4" angle iron, or 3" strap**



### **Cages and Halos**

- 1. Safety is a big concern in this class so make the inside of you cab safe. A dash bar, behind the seat bar and door bars are Mandatory. Maximum 6" tubing or channel iron may be used for these.**
- 3. Any bracing can be used inside the cab of the truck. A 4 point cage is required. The bracing can connect to the frame anywhere within the cab BUT CAN NOT GO PAST THE FIREWALL. Bracing can not go more than 12" behind the driver's seat.**
- 4. You may also run a halo bar directly behind the cab. Maximum 6" diameter. It may be bolted to the cab in 6 spots with 1" bolt max. May be welded to the top of frame only. Bolts may connect to the frame with a 1" max bolt.**
- 5. The 2 kickers must come from the top of the loop down to a location no further back than the front leaf-spring mount.**
- 6. This loop can be bolted to the floor, or welded directly to the frame on the plates no larger than 8"x8".**

### **Body Bolts**

- 1. All body bolts may be replaced with a maximum 1" bolts.**
- 2. You may add 6 extra box bolts from the frame to the box. That are 1"max bolt or U bolts or chain. Washers for box bolts can be 6"x6"x1/4" max and must be free floating. U-bolts will count as one bolt. Both bolts of the U-bolt must go through the same 6x6x1/4" plate.**
- 3. May sleeve body and box bolts with 2inch max diameter material**

### **Leaf Springs**

- 1. Shackle brackets may be welded to the frame.**
- 2. No more than 13 leaf springs per stack, no stagger needed.**
- 2. You may make a homemade shackle mount limited to 5 inches wide by 3/8" thick. May use a gusset to tie arms of shackle together under frame.**
- 4. You may leaf the front of a non-leaf vehicle**

**5. May add max 2" diameter spacer from bottom of frame to leaf pack to gain height.**

### **Tires and Brakes**

**1. No studded or 100% steel wheels.**

**2. Valve stem protectors are allowed but may not stick out of the rim.**

**3. Wheel weights must be removed.**

**4. Any tire allowed. Double stuffing is allowed. You can solid fill your tires if you wish.**

**5. NO SPLIT RIMS Allowed.**

**6. Full weld in center allowed no thicker than 3/8"**

**7. Brake systems must be operational.**

**8. Bead locks ok**

### **Bumpers**

**1 .Any stock truck or automotive car bumper and bumper brackets may be used on the front and rear of the vehicle.**

**2. Bumpers may be re-enforced on the inside only**

**3. Maximum tubing size 7" on home made bumpers**

**4. If you are reinforcing a factory truck bumper, the bumper must remain flat, car bumper skins must remain factory not changing any angles and must have the outer skin welded in place (meaning you may not change the contour of the bumper).**

**3. You may use a home made bumper bracket no taller than the frame and no longer than 18" long by 1/4" thick**

**4. You may add a cross member from frame rail to rail behind front bumper only. 4" angle iron or channel will be allowed to weld the bumper to.**

**5. Bumper brackets may not extend more than 18" onto the frame.**

**6. Maximum front and rear bumper height 30" to top of bumper**

**7. Minimum front and rear bumper height to the top of the bumper is 22"**

**Call Deryk Evens at 641-832-0520 with questions**

**If the rules don't say you can do it don't assume you can call first.**

## **Mid-Size Class Rules**

**1. Wheelbase specifications for midsize are 114" and shorter measured at the center of the front axle to the center of the rear axle.**

**2. FRONT wheel drive only**

### **General Rules**

**1. All glass, plastic and pot metal must be removed.**

**2. Nothing may remain in the bottoms of the trunk or doors.**

**3. All outer hardware must be removed – door handles, mirrors, chrome, moldings, screws, fiberglass, etc.**

**4. No added weight to any car.**

**5. Rear seats in all cars and all decking in station wagons must be removed.**

**6. Front seat must be securely bolted to the floor; however, these bolts may NOT go through the frame.**

**7. You must have a functioning seat belt.**

**8. All flammable materials must be removed from the inside of the vehicle other than safety padding and the driver's seat.**

**9. Brakes must be functional.**

**10. Vehicles may have a roof sign, minimum 15"x15," maximum 24"x24" contrasting colors, but may not be positioned in such a way to strengthen the car.**

## **Cages and Door bars**

- 1. No cage components may attach to or conceal a body mount.**
- 2. You may use channel iron or tubing up to 6" diameter for your cage components (Door bars, seat bars, and dash bar). Try not to use angle iron if possible.**
- 3. Door bars may not go through or be attached to the fire wall and must end 6" in front of the rear wheel house.**
- 4. Seat bar may be no further than 6" behind the driver's seat.**
- 5. No kickers, angled or otherwise.**
- 6. You may have 1 down bar to sheet metal only located in the middle of both front doors.**
- 7. All cage components must be in the interior of the car, not inside the door structure with the exception of the driver's door. This door bar may be inside the door to allow more room for driver's safety.**
- 8. Dash bars may not be connected to the firewall in any way**
- 9. Gas tank protectors are allowed on sedans, not wagons. They may not be more than 24 inches wide. 1 inch from sheet metal (no pounding) . Attached to the seat bar only. 3" tubing maximum.**
- 10. Floor sheet metal maybe patched where components will be mounted or for driver's protection, sheet metal only. No other patching is allowed unless it's a safety issue, call first. You must leave the rusty floors in place, do not cut them out.**

## **Doors**

- 1 Doors may be chained, wired or welded shut. 2 chains or wire loops per seam or welded 5" on 5" off with 2" wide by 1/4" straps. Straps may not go to frame. Chains and wire may go around frame.**
- 2 Driver's door may be welded solid.**
- 3 Driver's door plate recommended maximum 24" wide welded across driver's not to exceed 3" past front and rear seams.**
- 4. Tailgates on wagons and hatchbacks maybe welded 5"on 5" off with 2" wide by 1/4" thick steel. These plates may not be welded to the bumper or frame**

## **Hoods**

- 1. Hoods may be fastened shut in 6 locations to sheet metal only with (3 strands) #9 wire or chain (3/8) in a max. or a 2x2x1/4" angle iron 3 inches long with 1/2 " bolt welded to it and a 3"x3" free floating washer. Not connect together, must be separate. 2 locations may go to the bumper**
- 2. May have 2 -3/4" inch rods welded vertically to the side of frame as hood tie down**
- 3. No bolting skins of hood cut outs.**
- 4. Must have at least 1 8" hole in hood for fire access**

## **Bumpers**

- 1. Any automotive car bumper may be used except Chrysler pointy bumpers**
- 2. No stuffing of bumper may pound chrome skin down and weld**
- 3. Must be cut down to fit width of car, seams may be welded.**
- 4. No welding further back than 2" from front of frame.**
- 5. Crush zone on front frame-rail may be removed, bumper shocks can be welded or removed, bumpers can be welded directly to frame.**
- 6. Bumper mounting options.**

**A. Hardnose the bumper you may use up to 1.5"x1.5"x 1/4" angle iron on 4 sides of the frame. to weld one inch width of angle to frame and one inch width to bumper on 4 sides of frame.**

**B. Hardnose the bumper you may use up to a 5"x5"x 1/4" flat plate welded to the end of the frame to cap off the frame. Using welder only with no added material 1/2" wide max bead to attach plate to frame.**

**C. Stock shock option must be factory OEM shock for that year and make of the car. The bumper must be bolted to factory shock and welded around the bolt flange. The shock is to be bolted to the factory tabs on the frame and tabs welded with no added material with single pass of welder ONLY 1/2" wide bead max. You can drill, collapse and fully re weld the shock.**

### **Trunk**

- 1. Tucking you trunk lid is allowed.**
- 2. You may have 6 individual locations of 3 strand #9 wire, 3/8" chain may only go to trunk and quarter panel sheet metal or weld 5" on 5" off with 2 by 1/4".**
- 3. May crease trunk lid and speaker deck 4 inches max in middle from stock location.**
- 4. Fenders must stay upright**

### **Halo or Rollover bars**

- 1. You may add a halo bar to cage components listed above. 6" diameter maximum.**
- 2. Halo bars must be in a direct vertical line and no farther than 6" behind the rear of the seat.**
- 3. Halo bar must be in the interior of the car. The top of the halo bar may go over the top of the roof bolted to the roof sheet metal in 2 spots 1/2" bolts max thru cross halo bar or 2"x2"1/4" angle iron tab.**
- 4. Your halo must attach to your back seat bar or to your door bars, may extend to floor of the car attached to sheet metal only not the frame.**

### **Windows**

- 1. You must have 2 window bars, 2" maximum diameter with 4"x4" plate with in 6 inches of window track, or chain, wire running from roof to cowl in windshield area for driver's protection. May not attach to the cage in any way.**

**2. You may also run a rear window bar 2" maximum diameter with 4"x4" plate with in 6 inches of window track.**

**3. May have drivers window net only**

### **Tires and Brakes**

- 1. Any ply tire allowed, stuffed ok, Stem protectors allowed, wheel weights must be removed.**
- 2. May add an outer flap (extra sidewall) to outer side of tire for protection may screw or glue beads to rims.**
- 3. Must use factory rim on front axle, no wheel centers, bead-locks, rim or tire protectors.**
- 4. Solid forklift solid tires on rear ok .**
- 5. No studded or 100% steel wheels.**

### **Engines and Transmissions**

- 1. Engines may be wired, chained, in two locations, and can go around frame one loop only, 4 or 6 cyl. engine, must be stock for vehicle.**
- 2. May run carb swap intake. May use a carb protector attached to the Motor ONLY (not to motor mounts) and not strengthen the vehicle in any way or it will be removed**
- 3. May swap front K member mount with 5/8" inch bolt thru frame.**
- 4. May weld front strut shaft to strut to gain height with no added metal. NO REINFORCING STRUT!**
- 5. Transmission coolers are not allowed unless came from the factory**
- 6. May alter transmission linkage, modified ignition switches, and headers are allowed.**
- 7. Stock axles, with no bracing or modifying of brackets.**
- 8. Stock Fuel tanks must be removed**
- 9. Fuel cell or boat tank located in the back seat of car and completely covered with a nonflammable material.(can not run factory gas tank)**

**10. If running electric fuel pump, power source must be well labeled (fuel pump) in large bold lettering.**

**11. 2 battery allowed and must be moved to passenger front seat in battery box, securely fastened, no bungee straps, and covered with a nonflammable item.**

**12. May Switch center link of top motor mounts to 2" tubing must use factory core support and motor mount mounting brackets.**

**Call Ryan Fischer at 641-512-9082 with questions**

**If the rules don't say you can do it don't assume you can call first.**

## **Stock Mighty Minis Class Rules**

### **General Rules**

**1. All glass, plastic and pot metal must be removed.**

**2. Nothing may remain in the bottoms of the trunk or doors.**

**3. All outer hardware must be removed – door handles, mirrors, chrome, moldings, screws, fiberglass, etc.**

**4. No added weight to any car.**

**5. Rear seats in all cars and all decking in station wagons must be removed.**

**6. Front seat must be securely bolted to the floor; however, these bolts may NOT go through the frame.**

**7. You must have a functioning seat belt.**

**8. All flammable materials must be removed from the inside of the vehicle other than safety padding and the driver's seat.**



**9. Brakes must be functional.**

**10. Vehicles may have a roof sign, minimum 15"x15," maximum 24"x24" contrasting colors, but may not be positioned in such a way to strengthen the car.**

### **Cages and Door bars**

**1. No cage components may attach to or conceal a body mount.**

**2. You may use channel iron or tubing up to 6" diameter for your cage components (Door bars, seat bars, and dash bar).**

**3. Door bars may not go through or be attached to the fire wall**

**4. Seat bar may be no further than 6" behind the driver's seat.**

**5. No kickers, angled or otherwise.**

**6. You may have 1 down bar to sheet metal only located in the middle of drivers front door.**

**7. All cage components must be in the interior of the car, not inside the door structure with the exception of the driver's door. This door bar may be inside the door to allow more room for driver's safety.**

**8. Dash bars may not be connected to the firewall in any way**

**9. Floor sheet metal maybe patched where components will be mounted or for driver's protection, sheet metal only. No other patching is allowed unless it's a safety issue, call first. You must leave the rusty floors in place, do not cut them out.**

### **Halo or Rollover bars**

**1. You may add a halo bar to cage components listed above. 6" diameter maximum.**

**2. Halo bars must be in a direct vertical line and no farther than 6" behind the rear of the seat.**

**3. Halo bar must be in the interior of the car. The top of the halo bar may go over the top of the roof bolted to the roof sheet metal in 2 spots 1/2" bolts max thru cross halo bar or 2"x2"1/4" angle iron tab.**

**4. Your halo must attach to your back seat bar or to your door bars, may extend to floor of the car attached to sheet metal only not the frame.**

## **Doors**

- 1. Doors may be chained, wired shut. 2 chains 3/8" max or 3 wire loops per seam. Chains and wire may go around frame.**
- 2 Driver's door may be welded solid.**
- 3 Driver's door plate recommended maximum 24" wide welded across driver's not to exceed 3" past front and rear seams.**
- 4. Tailgates on wagons and hatchbacks maybe chained or wired shut 2 chains 3/8" max or 3 wire loops per seam**

## **Hoods**

- 1.Hoods may be fastened shut in 6 locations to sheet metal only with (3 strands) #9 wire or chain 3/8"max. 2 locations may go to the bumper**
- 2. No bolting skins of hood cut outs.**
- 3. Must have at least 1 8" hole in hood for fire access**

## **Bumpers**

- 1. 3 Options For Bumper.**
  - a. 80's and newer car bumper**
  - b. 4"x4" 1/4 "thick tube must remain totally flat**
  - c. Factory bumper**
- 2. Bumper mounting options.**
  - A. Hardnose the bumper you may use up to 1.5"x1.5"x 1/4" angle iron on 4 sides of the frame. to weld one inch width of angle to frame and one inch width to bumper on 4 sides of frame.**
  - B. Hardnose the bumper you may use up to a 5"x5"x 1/4" flat plate welded to the end of the frame to cap off the frame. Using welder only with no added material 1/2" wide max bead to attach plate to frame.**
  - C. Stock shock option must be factory OEM shock for that year and make of the car. The bumper must be bolted to factory shock and welded**

**around the bolt flange. The shock is to be bolted to the factory tabs on the frame and tabs welded with no added material with single pass of welder ONLY ½" wide bead max. You can drill, collapse and fully re weld the shock.**

### **Windows**

- 1. You must have 2 window bars, 2" maximum diameter with 4"x4" plate with in 6 inches of window track, or chain, wire running from roof to cowl in windshield area for driver's protection. May not attach to the cage in any way.**
- 2. May have drivers window net only**

### **Tires and Brakes**

- 1. No studded or 100% steel wheels.**
- 2. Valve stem protectors are allowed but may not stick out of the rim.**
- 3. Wheel weights must be removed.**
- 4. Any air filled style tire allowed. Double stuffing is allowed. No solid rubber tires.**

### **Engines and Transmissions**

- 1. Engines may be wired, chained, in two locations, and can go around frame one loop only, 4 or 6 cyl. Engine.**
- 2. No cradles, dp's or protectors of any form.**
- 3. Body mounts, suspension, and shocks must be stock only,**
- 4. Transmission coolers are not allowed unless came from the factory in factory position.**
- 6. May alter transmission linkage, modified ignition switches, and headers are allowed.**
- 8. Stock Fuel tanks must be removed from under vehicle and places in side of car buy must be securely mounted and covered**

- 9. Fuel cell or boat tank located in the back seat of car and completely covered with a nonflammable material.**
- 10. If running electric fuel pump, power source must be well labeled (fuel pump) in large bold lettering.**
- 11. 2 battery allowed and must be moved to passenger front seat in battery box, securely fastened, no bungee straps, and covered with a nonflammable item.**

### **Suspensions**

- 1. Must be stock OEM parts with no modifications, no reinforcing any parts.**
- 2. No leaf spring brackets, lift kits, helper springs, overload springs, solid shocks, wiring, welding or duct taping springs. Cars must bounce .**

**Call Ryan Fischer at 641-512-9082 with questions**

**If the rules don't say you can do it don't assume you can call first.**

## **Welded Mighty Minis Class Rules**

### **General Rules**

- 1. All glass, plastic and pot metal must be removed.**
- 2. Nothing may remain in the bottoms of the trunk or doors.**
- 3. All outer hardware must be removed – door handles, mirrors, chrome, moldings, screws, fiberglass, etc.**
- 4. No added weight to any car.**

- 5. Rear seats in all cars and all decking in station wagons must be removed.**
- 6. Front seat must be securely bolted to the floor; however, these bolts may NOT go through the frame.**
- 7. You must have a functioning seat belt.**
- 8. All flammable materials must be removed from the inside of the vehicle other than safety padding and the driver's seat.**
- 9. Brakes must be functional.**
- 10. Vehicles may have a roof sign, minimum 15"x15," maximum 24"x24" contrasting colors, but may not be positioned in such a way to strengthen the car.**

#### **Cages and Door bars**

- 1. No cage components may attach to or conceal a body mount.**
- 2. You may use channel iron or tubing up to 6" diameter for your cage components (Door bars, seat bars, and dash bar).**
- 3. Door bars may not go through the fire wall**
- 4. Seat bar may be no further than 6" behind the driver's seat.**
- 5. No kickers, angled or otherwise.**
- 6. You may have 1 down bar to sheet metal only located in the middle of each front door front door.**
- 7. All cage components must be in the interior of the car, not inside the door structure with the exception of the driver's door. This door bar may be inside the door to allow more room for driver's safety.**
- 8. Dash bars may be connected to the firewall with 4 straps 2 inches wide by ¼" thick steel**
- 9. Floor sheet metal maybe patched where components will be mounted or for driver's protection, sheet metal only. No other patching is allowed unless it's a safety issue, call first. You must leave the rusty floors in place, do not cut them out.**

#### **Halo or Rollover bars**

- 1. You may add a halo bar to cage components listed above. 6" diameter**

**maximum.**

- 2. Halo bars must be in a direct vertical line and no farther than 6" behind the rear of the seat.**
- 3. Halo bar must be in the interior of the car. The top of the halo bar may go over the top of the roof bolted to the roof sheet metal in 2 spots 1/2" bolts max thru cross halo bar or 2"x2"1/4" angle iron tab.**
- 4. Your halo must attach to your back seat bar or to your door bars, may extend to floor of the car attached to sheet metal only not the frame.**

### **Doors and Windows**

- 1. Doors may be chained, wired or welded shut: two (2) chains or wire loops per seam or welded 5" on 5" off with 2" wide by 1/4" straps. Straps may not go to frame. Chains and wire may go around frame**
- 2. Driver's door may be welded solid.**
- 3. Driver's door plate recommended maximum 24" wide welded across driver's door with in 3" of door seams**
- 4. Tailgates on wagons or trucks and hatchbacks maybe welded 5" on-5"-off with 2" wide by 1/4" thick steel, or chained per door rules. These plates may not be welded to the bumper or frame.**
- 5. You must have a minimum of 1 bar or max of 2 bars, 3" max, chain or wire running from roof to cowl in windshield area for driver's protection. May not attach to the cage in any way.**
- 6. You may have netting on Driver's door only.**

### **Hoods**

**Six (6) hold-downs are allowed on the hood.**

**2- 1" pins can be either welded down vertically to the side of the frame OR through the frame, A-arms forward. Max 6"x6" washers free floating.**

**In addition, no more than 4 other tie-downs are allowed from the following list:**

- 1. 1" max. threaded rod welded to sheet metal only.**
- 2. Angle iron to angle iron welded to fender and hood with 1 3/8" bolt 2X2X1/4 4 inches long**
- 3. Sheet metal-to-sheet metal only #9 Wire –two loops.**
- 4. Chains maximum 3/8"**
- 3. Must have at least 1 8" hole in hood for fire access**

### **Bumpers**

- 1. Bumpers must be no higher than 28" to the top of the bumper front and rear. Min 22 inches to top**
- 2. Bumpers are interchangeable.**
- 3. Any automotive car bumper may be used on the front or rear of the vehicle.**
- 4. You may use a 4"x4" square tube bumper**
- 5. You may weld the outer chrome skin to the backing and weld all the bumper seams.**
- 6. May stuff bumper as long as factory contour.**
- 7. You may weld the bumper to the frame with 2"x2"x1/4" angle iron.**
- 8. You may also use a 5" tall 8" long bumper bracket on 1 side of the frame.**
- 9. You may not weld the body to the bumper at any time.**
- 10. Bumpers may be cut to keep them out of the tires but no sharp points.**
- 11. Bumpers may be installed upside down.**

### **Tires and Brakes**

- 1. No studded or 100% steel wheels.**
- 2. Valve stem protectors are allowed but may not stick out of the rim.**
- 3. Wheel weights must be removed.**
- 4. Any air filled style tire allowed. Double stuffing is allowed. No solid rubber tires.**

**5. Weld in center allowed 3/8" max**

### **Engines and Transmissions**

**1. Engine swaps allowed.**

**2. May be solid mounted with minimal tube welded to the frame.**

**3. Lower cradle only with pulley protector allowed. No DP's allowed. Tranny braces are ok but can not be locked in tight must have room to move**

**4. Slider drive shafts allowed.**

**5. May alter transmission linkage, modified ignition switches, and headers are allowed.**

**6. Stock Fuel tanks must be removed from under vehicle and placed in side of car bay must be securely mounted and covered**

**7. Fuel cell or boat tank located in the back seat of car and completely covered with a nonflammable material.**

**8. If running electric fuel pump, power source must be well labeled (fuel pump) in large bold lettering.**

**9. 2 battery allowed and must be moved to passenger front seat in battery box, securely fastened, no bungee straps, and covered with a nonflammable item.**

### **Frames and Suspension**

**1. Body bolts may be changed. 1" is the maximum diameter allowed with 3"x3"x 1/4" plates in original positions. Plates must be free floating.**

**2. Front and rear springs can weld one 1 1/2 x 1/4" strap vertically only onto spring**

**3. Rear leaf spring clamps are allowed four per spring 2" x 1/4" clamps**

**4. 7 max leaf springs with 1 inch stagger.**

**5. You may make a homemade shackle mount limited to 5 inches wide by 3/8" thick. May use a gusset to tie arms of shackle together under frame. When leafing the rear of a non leafed vehicle.**



- 6. No leafing front of non leafed vehicle**
- 7. Rear end can be chained to humps.**
- 8. No doubling of body panels allowed, no added metal allowed**
- 9. Body creasing, enhancing of body lines or additional body lines will be allowed.**
- 10. No body seam welding allowed except for the exterior of doors**
- 11. Floor sheet metal maybe patched where components will be mounted or for Driver's protection, sheet metal only. Leave rusty one in place.**
- 12. Holes may be cut in floor and firewall to accommodate the shifter, fuel lines, and transmission lines.**
- 13. Rear end of choice. No bracing allowed may re-weld brackets to rear end for fitment. Nothing excessive in size.**
- 14. If frame is badly bent you may plate one side with one 3"x 5"x 1/4"plate. Limit 3 plates per rail. With 2" gap between plates.**

**Call Ryan Fischer at 641-512-9082 with questions**

**If the rules don't say you can do it don't assume you can call first.**