

FLORIDA NATIVES NURSERY Truck & Trailer Repair



BULL BULL 2020 EDITION HO-IMEAN

RTHIM VERS

ŒŢ.

Ring Power

WISEGUYS









Table of Contents

Event Rules	3
DISQUALIFICATIONS	6
PROTESTS	7
PULL-OFFS	9
RAIN/CANCELLATIONS	
VIOLATIONS	9
GENERAL RULES ALL CLASSES	9
A-AUTOMATIC TRANSMISSIONS	10
B-BRAKES	10
C-CHASSIS/SKIDS	10
D-CLOTHING	11
E-CLUTCH/BELL HOUSING/GEARBOX	11
F-DRAWBARS	13
G-DRIVELINE SHIELDING	
H-ENGINES	17

I-EXHAUST	19
J-FENDERS & SEATS	
K-FUELS & FLUIDS	
L-IGNITION/DATALOGGERS	
M-TIRES	
N-TURBOCHARGERS	
O-SAFETY SWITCHES	
P-STABILIZER BARS	
Q-WEIGHT	
VEHICLE GENERAL RULES (SAFETY) SUPER MODIFIED TRACTORS	24
MINI ROD (BLOWN)	29
MINI ROD SMALL BLOCK NATURALLY ASPIRATED	
SUPER MODIFIED 2-WHEEL DRIVE TRUCKS	
LIMITED PRO DIESEL 4X4 TRUCK HOT ROD SEMI	
6,200LB 4WD PRO STOCK	
6,000LB MODIFIED 2WD	
8,000LB LIGHT LIMITED TURBO TRACTORS	
6,250LB LIGHT LIMITED SUPER STOCKS	

Event Rules

Mid Florida Tractor Pullers Association reserves the right to add/ implement any safety rule as it deems necessary at any time.

- Any contestant under 18 must have written consent from parent or guardian and prior approval from Mid Florida Tractor Pullers Association. Minimum age for competition is 16 years old.
- If the senior track official and tech official feels that the vehicle is unsafe, they have the right to not allow the vehicle to hook.
- Contestant may not be allowed to participate due to emotional or physical reasons (i.e. including drinking or illness, etc.).
- Only driver will be allowed on vehicle when it is being towed or driven. No riders on tow tractors or track equipment will be permitted.
- 5. Driver must be in driver's seat while engine is running.
- Vehicle must be in neutral or park while hooking too or unhooking from sled. Driver is recommended to raise hands while hooking or unhooking from the sled.
- Any driver or crew member found under the influence of drugs or using intoxicating agents prior to and during his/her class will be disqualified.
- 8. No alcohol/intoxicating agents allowed on the track.

- 9.No video taping is allowed closer than 30 feet from track or unless directed by head track official.
- 10. The first puller in the class will have the option of test puller. The test puller may accept their distance, come immediately back, drop five (5) positions or last in the pulling order. The test puller may drop to last for mechanical breakage, if visible to the finish line track official. The test puller must inform the track official of their decision before leaving the track.
- 11. For mechanical reasons only a puller may drop to last position in the class. This is allowed by track judge's discretion. Safety equipment does not qualify for a mechanical problem.
- 12.Once track is ready and competition director signals competitor to the track, competitor will have four (4) minutes to make a measurable distance under green flag conditions.
- 13. Puller may spot the sled anywhere in bounds and behind starting line if they wish. This must be done while sled is coming back to the starting line from the previous pull. Only one sled spotting is allowed.
- 14.All pulls will start with a tight chain. No jerking of sled is permitted. Excessive jerking of the sled will result in disqualification.
- 15.Each competitor will be allowed two (2) attempts to make a measurable pull. An attempt is defined as moving the sled a measurable distance (one inch or farther).
 - a) On his/her first attempt, if the competitor lets off the throttle

- before going 85 feet, the competitor will get a second attempt, even if he/she went beyond 85 foot mark (so as not to slam on the brakes and come to a safe stop).
- b) If no attempt is made to back off the throttle, no second attempt will be given.
- 16. Excessive loss of liquid will result in disqualification if vehicle is under the green flag. Failure to stop will result in disqualification. Excessive is defined as any steady or intermittent stream equal to a spot on the track of ten (ten) inches in diameter. Major mechanical breakage will not result in disqualification.
- 17. Pulling will be considered over when forward motion stops. Puller must stop immediately when flagged or be disqualified.
- 18. Any re-pull caused by contest malfunction, the puller may drop five (5) positions or drop to the end of the class. Puller may move weight, but MAY NOT ADD ANY ADDITIONAL WEIGHT or they will be disqualified.
- 19. All pulls will be measured to the nearest inch, unless a laser is used. In the event of a tie for first place only a Pull Off will incur at the conclusion of the class.
- 20. When possible, all contestants must drive off and on the track. Tow starting will be done as a last resort and under track judge's discretion.
- 21. All pulling vehicles must pass a tech inspection and meet all safety requirements before they can pull at any event. Mid Florida Tractor Pullers Association retains the right to inspect any vehicle at any time. Refusal will result in disqualification.

- 22. No competitor may compete in a class once the class has started, unless prior arrangements have been made with Mid Florida Tractor Pullers Association. Vehicle must also pass tech inspection prior to pulling.
- 23. Boundary line will be 320' long to start the pull, even though a Full Pull may only be 300'. Competitor may not touch boundary lines at any time. The Full Pull line will be established by the Head Track Official no less than 300 feet and no later than the fifth competitor, after a sled reset. The Full Pull line can be set in front of a vehicle even if vehicle has gone past 300 feet at either 310 or a maximum of 320 feet. White disqualification line(s) will be 320 feet for entire contest. If Head Track Official determines a floating finish is needed that will be decided at the drivers meeting prior to the event.
- 24. While vehicle is at scales, weighing only one crewperson allowed in scale-master's area.
- 25. Judges decisions are final. There is no appeal process. Disagreement will result in disqualification.

DISQUALIFICATIONS

- Out of bounds, this is described as any part of the pulling vehicle touching the white boundary line.
- 2. Loss of weight under green flag, unless you are a test puller.
- 3. Loss or failure of safety equipment or equipment belonging to vehicle under the green flag.

2. All protest fees will be in cash.

 a) If protested vehicle is found legal, then fee will be forfeited to person found legal.

b) If vehicle is illegal, then vehicle is disqualified with a loss of purse and fee is returned to protestor.

3. Fee for protest are as follow:

- a)Cubic inch \$1,000. Complete tear down. A 1% variance will be given for wear and tear. \$200 from protest fee for teardown is paid to (Official/Shop Fee) in charge of the teardown. Remainder of teardown fee is returned to protestor or given to protested party pending outcome of teardown.
- 4. Any competitor knowingly competing with a performance enhancing equipment verified by a Head Tech Official or refuses to tear engine down at the event will be disqualified for a period of 375 days and including actions discovered by protests. Suspensions will include driver and vehicle.
- The officials and the protested are the only people allowed near the vehicle during protest. Anyone causing disruption during a protest will be disqualified.
- Mid Florida Tractor Pullers Association reserves the right to suspend a competitor for any rules violation and will receive written notice in five (5) working days.
- 7. Judges decisions during the event are final. In order to appeal a tech officials decision the appealing member shall make a written request and deliver it to the event director or Mid Florida Pullers Association within 72 hours of the disqualification. The appeal shall be evaluated as promptly as possible. The meeting must allow parties involved the opportunity to personally present their position or facts at the meeting.

PULLOFFS

- 1. Each competitor will have one (1) attempts to make a measureable pull.
- 2. In a pull-off each puller will hook in the order that they pulled in original class lineup. No dropping of positions is allowed in a pull-off.
- If the track official believes that an error has occured in sled setting, pull-off may be restarted. In this case, the first puller may come right back or drop to last.
- 4. In a pull-off, a floating finish line will be used for all competitors.

RAIN/CANCELLATIONS

- 1. Any class not completed for any reason will be considered a rain out.
- A session of pulling will be official if 1/2 of the advertised classes are completed.
- 3.If purse is not paid to cancelled class, entry fee will be refunded.
- Mid Florida Tractor Pullers Association officials will determine if a class or session is a rain out.

VIOLATIONS

 Anyone suspended will not be allowed in the track or pit area for the duration of the suspension. If vehicle is sold, vehicle will be allowed to pull, but suspended party must not be involved with vehicle in any way.

GENERAL RULES ALL CLASSES

A-AUTOMATIC TRANSMISSION

- 1. The use of torque converters, automatic shifts, etc. will be permitted.
- All vehicles using an automatic transmission must have an SFI Spec. 29.1 automatic transmission flex plate. No cast Iron is permitted.
- 3. All vehicles using an automatic transmission will use a positive gear lockout.
- 4. All automatic transmissions must have an approved safety blanket over the torque converter area. A full length safety blanket is required. Automatic transmission shield or tractor blanket must meet SFI Spec. 4.1

B-BRAKES

- All pulling vehicles will have adequated stopping brakes.
- 2. All brakes in the driveline will be shielded 360degree with 5/16"inch steel or 3/8"inch aluminum, around the brake components. Ends must be enclosed in the 1/8"inch steel or aluminum, no cast metal permitted to be used as part of shield.
- All tractors and 2WD trucks will have working individual working rear wheel brakes.
- 4. All 4WD trucks will have complete working front and/or rear brakes.

C-CHASSIS/SKIDS

- All pulling vehicles will have a wide front end. Front wheels must track within rear wheels.
- 2. Component chassis tractors, engine and sheet metal does not have to match, but meet Mid Florida Tractor Pullers Association approval.

- 3. Tractor Divisions: A front axle brace will be mandatory. Front axle support to be made of 2.00"x.095 tubing or 2.00"x.120 mild steel tubing or same material as tractor frame rails. Front axle supports should connect to each frame rail inline and extend towards front of tractor. Front skid/front axle support should have radius to prevent digging into track. Front axle support front end weight of tractor. Support should have a maximum of 4" ground clearnace.
- 4. Suspension systems with air must utilize a self-contained system with the following components. Maximum of three pneumatic lines or hoses and one pressure gauge mounted on suspension's manifold system. Electrical wires are prohibited. Cannot be operated from drivers compartment and NOT during competition.

D-CLOTHING

- Fire suits required in all classes, minimum of SFI 3.2. A) In flip top bodied vehicles without a firewall or working doors, the driver will be required to wear an SFI 3.2A-5 approved suit. B) Fireproof gloves, fireproof head-sock, and fireproof shoes must meet SFI Spec.3.3 C) All helmets must meet Snell 90 minimum, or SFI Spec. 31.1, 31.2, 41.1, or 41.2.d D) Neck collars are recommended.
- 2. Helmet face shield must be worn down during competition.
- 3. Crew shirts, long pants are highly recommended in the hot pit area.

E-CLUTCH/BELLHOUSING/GEARBOX

1.All engines using a clutch flywheel assembly will run a full block saver plate.

Material being 1/4 aluminum or 3/16

steel minimum.

- 2. All automotive type engines using a clutch will use a 1/4" inch, one piece SFI 6.1, 6.2, 6.3, containment bell housing.
- 3. One cooling hole will be allowed in the bell housing, one (1) inch maximum diameter. Hole must not be in explosion area of bell housing.
- 4. No Welding will be allowed in the explosion area of the bell housing.
- 5. No chemical milling permitted.
- 6. There will be five (5) 3/8" bolts or four (4) 1/2" bolts to secure bell housing to transmission.
- 7. All inspection maintenance holes must be no wider than 8 1/2" inches and the ends of the holes shall be smoothly and fully radiused to produce an oval shape.
- 8. Four (4) 3/8 grade 5 or better bolts are required, in the top half of bell housing to block. Six (6) evenly spaced grade 5 or better bolts are required on bottom half of bell housing.
- Any vehicle using two blown or turbocharged automotive engines, three naturally aspirated or any industrial marine or aircraft engine that is turbocharged or twin staged supercharged on one clutch must have a liner in the bell housing.
- 10. No cast iron clutch components or flywheels will be permitted.
- 11. Billet steel, aluminum, SFI 1.1 or SFI 1,2 flywheels will be accepted.
- 12. Clutches, flywheels and related components must be mounted to engine on vehicles using automotive type engines

- 13. Modified: All cross boxes must have a total material minimum of 1-1/2" billet aluminum or 3/4" steel material from nearest part of rotating gear to the outside edge. If cross box does not meet minimum material a safety blanket made of a minimum of 20 layers of ballistic nylon or 15 layers of Kevlar which will surround entire gearbox. Blanket will have a minimum width of 3x the width of the gearbox to give a horse shoe effect on end-capping gearbox. Blanket will be considered 1/4 steel to help meet approved total thickness.
- All clutches on aviation, marine and industrial engines must be approved by the Mid Florida Tractor Pullers Association.
- Mid Florida Tractor Pullers Association reserves the right to spot check any clutch components at any time.

F-DRAWBARS

- Hitch must be rigid in all directions. Hitch length and height cannot change before, during or after the pull. Drawbars must have the pivot pin on the same plane as the hook point. Drawbar must be parallel to the ground within (SS/SF/PRO/2WD) 15degree. No cam, "L" or drop down hitches or cam type rear ends permitted.
- 1a. MOD drawbar must be parallel to the ground within maximum of 10 degrees over its 18" length permitted.
- 2. All vehicles are required a safety hitch. Safety hitch must be as strong as primary hitch and cannot be connected to primary drawbar. Safety hitch must be mounted eight (8) inches below primary on all tractors and twelve (12) inches below primary for all trucks. A safety hitch should be a minimum of 3/8" thick.
- All drawbars will have an opening minimum of 3.75"x 3" inches.

- 4. All classes through 7500# must meet the following requirements: Drawbar must be a minimum of two (2) square inches total material at any point. This will include area of the pin removed: pin will be 7/8 minimum. Must be a steel drawbar, not more than 1-1/2" x 1-1/2" square stock, nor less than one by one.
- 5. All classes above 7500# must meet the following requirements: Drawbar must be a minimum of 2-1/2 square inches total material at any point. This will include area of the pin removed: pin will be 15/16 minimum. Must be a steel drawbar, not more than 1-1/2"x 1-1/2" square stock, nor less than 1-1/4"x 1-1/4"
- Any provisions or adjustments (ex. air pressure) that increase drawbar height after drawbar had been checked and "set" are prohibited.

2WD TRUCKS:

- 1. Hitch point must be clear and visible for hook and unhook of sled chain.
- 2. Drawbar must be mounted solid to frame and rigid in all directions.
- 3. Drawbar must be parallel to the ground.
- 4. Hitch height not to exceed 30 inches.
- 5. Pulling point can be no more than 1-1/2" inches from back of drawbar.
- Hitch length can be no shorter than 18" from hook point to center of rear axle, measured horizontally.
- 7. No cable, chain or clevis allowed in hitching device.

4WD TRUCKS:

1. Point of hook to centerline of rear axle shall be no less than 30% of

of vehicles wheelbase.

- 2. Hitch height not to exceed 26 inches.
- 3. Drawbar must be mounted solid to frame and rigid in all directions.
- 4. Pulling point can be no more than 1-1/2" inches from back of drawbar.
- 5. No cable, chain or clevis allowed in hitching device.
- 6. If bed is too long it may be cut to accomodate 30% drawbar.
- 7. Hitch point must be clear and visible for hook and unhook of sled chain.

TRACTORS:

- Minimum hitch length 18"inches from center of rear axle to hook point measured horizontally.
- Hitch height maximum of 20"inches and must be parallel to ground. It is highly resommended to have hitch cut from one solid steel piece with no welds.

MINI RODS:

- 1. Maximum drawbar height 13"inches Maximum drawbar lenght 6"inches.
- 2. Must have a 2"inch round hole, maximum of 2.25"inch.
- 3. Thickness around the hole must be .75"inch thick and no greater cross section thickness of .75"inch 9c. Minimum of .50"inch hitch/pull pin.
- 4. Hiching device constructed of one solid steel piece which has a minimum thickness of 1.00"inch. No tubing permitted.

5. Adjusters must be no farther than 5.00" from point of hook.

G-DRIVELINE SHIELDING

- 1. Loops on all driveline must be round.
- 2. All u-joints must be shielded 360degrees with 3/8"inch thick aluminum or 5/16"inch thick steel. Shield will be six (6) inches long minimum and centered on u-joint. Inside diameter of shield will be no more than two (2) inches larger than u-joint. If aluminum is used on u-joint shield, and 1/8" insert will be put inside of shield at u-joint area six (6) inches wide.
- 3. All vehicles with planetary rear ends will have the drive line totally enclosed with 5/16"inch steel or 3/8"inch aluminum. The inside diameter will not be larger than two (2) inches larger than the largest universal joint. No more than 1/4"inch of driveline will be visible. Bolts holding shield together will be 3/8"inch grade or better, bolted every two (2) inches or closer.
- 4. All other vehicles not using planetary rear ends will have loops 360 degrees around driveline two (2) inches away from driveline, made of 3/8"inch aluminum or 5/16"inch steel, and spaced every 36"inches.
- 5. Maximum length of driveline on a modified tractor is 48"inches.
- 6. 4x4 trucks will have three (3) loops per shaft, evenly spaced on driveline, 3/8"inch aluminum or 5/16"inch steel thickness, two (2) inch maximum away from driveline.
- 7. All intermediate shafts between transmission and transfer case will be totally enclosed in 3/8"inch aluminum or 5/16"inch steel, 1/4"inch of shaft may be visible.

H-ENGINES

- Shielding on V or Y type engines must be from the base of the head to two
 (2) inches below the crankshaft throw. Frame may be used as all or part of
 the shield provided it is solid and covers the required area.
- Shielding on in-line engines will run from hood to two (2) inches below crankshaft throw. Shield must be complete, no holes accepted. Shielding must extend complete length of block and be securely fastened.
- All engines will have a deflection shield, running the complete length of the block casting. Shield must be securely fastened and must be .060"inch thick. Starters, exhausts, fuel pumps, etc. will not be considered as part of the shield.
- 4. Shielding will be made of a total of .125 thickness steel or aluminum.
- 5. Engine fans must be completely shrouded with steel 1/16"inch or thicker. Electric fans excluded.
- All automotive engines equipped with a harmonic balancer must have balancer that is SFI Spec 18.1 and carry SFI identification.
- 7. All supercharger drive components will be shielded on top and sides with .060"inch steel or 1/8"inch aluminum. Side is defined as to the centerline of bottom pulley. Shield should be wider than drive components.
- 8. All vehicles using an automotive type supercharger will use aluminum blower studs, SEMA specs 6061 T-6 to secure blower to intake manifold. Blower straps meeting SFI Spec 14.1 or high quality nylon braided straps are required at all events.
- 9. Carbureted, or injected, marine or aircraft engines using a centrifugal super

charger must be shielded as follows:

- a) Shielding will be the same on both sides of the supercharger.
- b) The shield will start at the same at the centerline and extend four (4) inches rearward and four (4) inches forward.
- c) Notching will be allowed only to fit around necessary components.
- d) On the front edge of the shield there will be a rolled lip, extending inward one inch and at a 90degree angle.
- e) Shield will be constructed of 1/4"inch thick steel and be bolted every two (2) inches or closer with 3/8"inch grade 5 or better bolts.
- f) Shield to start at bottom of housing and go over top and down the other side.
- g) Superchargers, as specified in rules above, may use a safety blanket with the following properties: 22ply ballistic nylon or 18ply Kevlar
- All diesel engines will have a manual three-way dump valve installed ahead of the injection pump, to be operated from dash panel.
- 11. All diesel engines: truck or tractor permitted maximum deck plate of one inch.
- 12. Any tractor sheet metal consisting of nonferrous material must have additional shielding inside of hood area. No open vents or louvers in hood area without a minimum of .125 steel or aluminum in turbocharger space.
- 13. All turbocharged engines will have one cable totally surrounding the engine block and head. The cable will consist of 3/8"inch diameter and located between the first and second cylinders. Cable must pass through the manifold areas. Cable will have four (4) to six (6) inches of slack. There will be minimum of four (4) clamps at all splices.

I-EXHAUST

- 1. All vehicles must have exhaust discharging vertically within ten (10) degrees of plumb. Height to be a minimum of 8 inches above the bend in pipe which discharges vertically. Bottom of bend to top of pipe.
- 2. No megaphone pipes allowed.
- 3. Venturi-style headers permitted.
- 4. No rain caps permitted.

J-FENDERS & SEATS

- All tractors must have some type of barrier between driver and tire. Barrier must be capable of supporting weight of driver.
- 2. All vehicles must have a strong and rigid seat.
- Fender must be constructed so that when driver is secured in the competition position, no part of driver's body can touch the tires.

K-FUELS & FLUIDS

- Acceptable fuels are gasoline, diesel fuel, alcohol, and methanol. No fuels in pressurized containers. No oxygen carriers or combustion accelerators permitted.
- No oxygen carriers or combustion accelerators allowed in water injection.Only water soluble oil permitted in water injection.
- 3. No nitrous oxide, nitro methane, or propylene oxide. No ether bottles (starting aids) allowed on board while pulling.
- 4. Top lube is allowed, but no nitro based top lube will be accepted.

- 5. Intercoolers will be permitted to carry only water and ice.
- 6. All competitors will report to the scales full of fuel/water etc.
- 7. All diesel tractors & trucks will have a fuel sampling valve.
- All diesel powered competition vehicles will have a water injection sampling valve, if no valve exists, the tank line will be unfastened to produce a sample.
- All fluids are subject to diagnostic screening which includes but not limited to, specific gravity, mass spectrometer, oxygen concentration, and burn test(s).
- 10. Diesel fuel standards for dielectric constant test are greater than 30 and less than 100. Any mixture of diesel fuel, upper cylinder treatments, cetane, etc. that does not fit into the required standard will be disqualified.

L-IGNITION/DATALOGGERS

- Electronic fuel injection is prohibited except diesel truck classes (2.6/3.0/DieselSS4x4)
- 2. Electronic timing delay devices or programmable ignition boxes prohibited (LTSS/MOD/2WD)
- No traction control devices allowed.

M-TIRES

- 1. 30.5x32 maximum of 210"inch circumference, when inflated to 10psi on a 28"inch rim. Tread width not to exceed 31"inch.
- 2. 24.5x32 maximum of 210"inch circumference, when inflated to 10psi

on a 26"inch rim. Tread width not to exceed 25"inch.

- 3. Modified 4x4 trucks on a 20"inch rim, maximum circumference 112"inches inflated to 30psi.
- 4. Super Modified 2wd/Mini-Rods On a 18"inch rim, maximum circumference 143"inches inflated to 28psi.

N-TURBOCHARGERS

- All turbochargers mounted outside normal engine shielding will be shielded in .060 steel. All intercoolers mounted outside of normal engine shielding will be .060 aluminum.
- All tractor turbocharged tractor engines:
 In vertical position of exhaust: 2- 3/8 grade 5 (minimum) bolts, installed 90degree to each other within one inch. In horizontal portion of exhaust: 2- 5/16 grade 5 (minimum) bolts, installed 90degrees to each other within one inch of each other and within 4"inches from exhaust housing flange.
- All truck turbocharged engines should have; 2- 5/16 grade 5 bolts, installed 90degrees to each other within one inch of each other and within 4"inches from exhaust housing flange.
- 4. Any single turbo (3.0 and larger in diameter) must have a minimum of 1/8" inch cable wrapped around turbo. Cable must wrap two revolutions around turbo, clamped by a minimum of two clamps at splice, or metal collars around intake with attaching 1/8"inch cables to exhaust housing, or Kevlar lined turbo blanket covering the intake housing.
- All turbocharger alcohol engines shield sparkplugs with minimum of .125 steel or aluminum within two inches any direction of centerline of spark plug.

O-SAFETY SWITCHES

- 1. All vehicles will be required to use a kill switch.
- 2. Kill switch will be securely mounted to the back of the vehicle and have a two (2) inch diameter ring to attach the sled. Kill switches will be located as indicated below.
 - a) Tractors (except Minis) located in the rear, center of the vehicle, maximum of 6" off center in any direction and 40"inches above the point of hook.
 - b) Minis located in the rear, center of the vehicle, maximum of 6" inches off center in any direction and 18"inches above the point of hook.
 - c) TWD and FWD located in the rear, center of the vehicle, maximum of 6"inches off center in any direction, 16 inches above the point of hook.
- 3. A tie strap will be used during tech to show vehicles have been teched. A 1/4"inch hole will be used to securely hold tie strap just above the kill switch. Only if tie strap is broken, decided by head track official, will competitor be given opportunity to pull again.
- 4. A white safety light is required to indicate that the competition vehicle is in reverse, mounted on the rear of the vehicle directly above or below the kill switch. A light in the drivers compartment must be operated off the same system.
- 5. Kill switches on diesel motors will have the following:
 - a) Control for the driver must not be the same control for the sled
 b) Air shut off will consist of cap or guillotine that closes off air into the engine. The cap or quillotine will be spring loaded. Butterfly systems not permitted.

P-STABILIZER BARS

- Stabilizer bars should be rigid in all directions and must support the weight of the vehicle for the heaviest class it will compete in.
- 2. Stabilizer pads must not be more than ten (10) inches off the ground.
- 3. The stabilizer pad should be parallel to the ground and must be a minimum of five (5) inches square, with a minimum of 20"inches allowed from the outside of one pad to the other.
- 4. Stabilizer bars may be in no way connected to drawbar assembly.
- 5. Stabilizer bars must have a braze that extends vertically twelve (12) inches from the rear most tip of the skid pads. There must be a support brace extending inward to frame axle or top of stabilizer bar arms. Vertical race should extend rearward a minimum of two (2) inches from radius of rear tire.
- No cross bars between stabilizer bars behind the point of the drawbar hook.
- 7. Stabilizer bars are required on all classes, except for 4x4 trucks.

Q-WEIGHT

- 1. No loose ballast inside the vehicle will be permitted.
- 2. No vehicle weighing more than class will be permitted.
- 3. Any weight loss while hooked to the sled and under the green flag will result in disqualification. Any weight touching the ground, although may be attached to the pulling vehicle, the pull will be disqualified. Internal breakage is an exception and also test puller in each class is an exception.

VEHICLE GENERAL RULES (SAFETY)

- All pulling vehicles are required to have a minimum of 2.5lb fire extinguishers which are fully charger with gauge operational. Extinguishers must be within reach of driver.
- 2. Roll Cage/ Driver Restraints
 - a) All tractor classes must use a SFI certified roll cage (current within 5 years) with a 5-point harness and a quick release design.
 - b) TWD and FWD vehicles are required to have a securely installed lap belt with a quick opening clasp.
- All vehicles will have a safety switch. The safety switch will ground the ignition and the electric fuel pumps on spark ignition motors and shut off the air intake to diesel motors.
- 4. No batteries are allowed inside cab of the vehicle unless they are in a marine battery box and secured to the vehicle frame. Shielding is required for battery posts that are exposed.
- All pulling vehicles will have a dead man throttle that will automatically return to the closed position. Throttles will work in a reverse to forward motion, reverse being closed.
- 6. All pulling vehicles must have a starter interrupter switch that will allow starter engagement only in neutral or park position on a transmission gear selector for mechanical reasons during the season.
- 7. All vehicles using a foot throttle must use a toe strap.
- All vehicles using an automatic transmission must have a position gear lockout.

- Drivers or crewpersons must be seated and in control of the pulling vehicle any time motor is started or running.
- 10. All pulling vehicles must have a reverse safety light.
 - a) A white light automotive quality, a minimum of 2"inches in diameter, must be mounted within 30"inches of hooking point. And within 6" inches of center line.
 - b) A light in the dirver's compartment must be operated off the same system.
 - c) Both lights and the starter interrupter switch will be operated off of the shifter levers, NOT the clutch pedal.
 - d) The reverse light should illuminate when vehicle is in reverse. Lense color should be clear.
- 11. Competition vehicles may not have any headlights or lights of any kind or any color that are aimed forward as to impair the flagman's vision while traveling down the track.
- 12. Mid Florida Tractor Pullers Association reserves the right to refuse any competitor the right to attend or participate at any event.

IV TRACTOR

- 1.All engine blocks must remain in original location as intended by the manufacturer. Sheet metal to be stock length and location must be stock appearing.
- 2. Tractors must have grill and hood in place as intended by manufacturer.
- 3. Tractors must have stock block, agricultural type block, OEM replacement block. No automotive blocks permitted. Maximum of 8 cylinders permitted.
- 4. Maximum wheelbase is 114"inch and maximum length is 13' from the center of the rear axle to forward most part of the tractor.

- 5. Up to four (4) turbochargers permitted, but only three (3) pressure stages permitted.
- 6. All turbocharged engines on tractors will have one cable totally surrounding the engine block and head. The cable will consist of 3/8" inch diameter and located between the first and second cylinders. Cable must pass through the manifold areas. Cable will have four (4) to six (6) inches of slack. There will be a minimum of four (4) clamps at all splices.
- 7. A deflection shield between driver and engine from top of hood and top of transmission housing or clutch housing is required. Deflection shield will go from side shield to side shield. This will help provide a barrier during a flash fire.
- 8. All tractor engines are required to shield all rotating mass mounted on the front of the crankshaft. Shield to be frame rail to frame rail by a minimum .125 aluminum or steel fastened to the frame on each side by two evenly spaced bolts. (3/8"inch grade 5 bolts minimum).
- 9. All tractors are required to have an approved bell housing blanket that meets the following specifications: 20 ply ballistic nylon or 20 ply Kevlar style 713 betting construction. At least seventeen (17) inches wide and long enough around the bell housing with six (6) inches of overlap, secured with a two (2) inch wide nylon web straps, with a steel "d" ring on one end and sewn the length of the blanket, except overlap area and long enough to pass back through the "d" ring and to be tied in a saddle cinch and with four (4) two inch nylon webs retaining strips, each at the front and back of blanket.
- All tractors will run a safety tie bar system or a one piece frame rail secured to the rear axle housing.
 - a) Tie bars will be mounted with at least four (4) axle housing bolts.

- a) Tie bars will be mounted with at least four (4) axle housing bolts.
- b) Tie bars will extend forward of bell housing area and be fastened to side of the block with a minimum of two (2) 5/8inch bolts.
- c) Tie bars will be of sufficient strength to support weight of the tractor with the bolts used to split tractor removed.
- 11. All safety blankets will be mounted inside safety tie bar system.
- On cast iron OEM chassis a 1/2"inch steel spacer plate is permitted for clutch clearance.

COMPONENT CHASSIS:

- Component tractors are permitted. All new component tractors must have approval of sheet metal and engine combination from Mid Florida Tractor Pullers Association.
- Front nose of the crankshaft can be no lower than 4"inches of the center of the rear axle.
- 3. Aftermarket chassis, replaces OEM clutch housing with an SFI 6.2 or 6.3 bellhousing in its place.
- 4. The engine placement can be no farther forward than 60"inches from the centerline of the rear axle to the rear of the block.
- 5. No four-wheel drive tractors will be permitted.
- 6. All tractors with a competition weight of 7,000# to 10,000# will require a 47.1 SFI Spec rollover protection.

SUPER MODIFIED TRACTORS

- Any four reciprocating internally combusted, automotive combusted, automotive engine type tractors will be limited to 8-71 supercharger maximum.
- Any three reciprocating, internally combusted, automotive engine type tractors will be limited to 14-71 supercharger maximum.
- 3. Three (3) Allison type powered engines.
- 4. Any two (2) industrial engines. Maximum of 2 pressure stages.
- 5. All turbine powered tractors will be limited up to 9,460 horsepower rating including water rated as 10%. (Ex. 2850 X2=5700 + 10% water (570) = 6270 total HP. See Turbine Engines for horsepower ratings.
- 6. Competitors may disable engine or engines to meet class limits.
- 7. Weight Maximum weight permitted 7,800#
- 8. All automotive engines are limited to two (2) valves per cylinder.
- 9. No screw type superchargers allowed.
- 10. All burst panels must face away from drivers.
- 11. Maximum bore spacing is 5.00"
- 12. No timing delay devices permitted.
- All Super Modified Tractors will require a 47.1 SFI Spec rollover protection.

14. Kill switch at a 90degree angle or less, to ease the function of switch.

15. Chassis:

- a) No portion of the tractor may go beyond 14'feet from the center of the rear axle.
- b) Any Mod that has the frame bolted to the transmissions must have the frame bolted to the axle housing. Frame must be sufficient enough to withstand the bolts being taken from the plate of the transmission or rear end, and can still support the weight of the tractor.

c) Driveshafts will not exceed 48"inches and no input or output shaft that attaches to a driveshaft will exceed 4"inches beyond a bearing.

- d) A one inch material minimum below the end of the driveshaft shield and a bolt. The one inch material will be found in pilot holder at each end of the driveshaft shield. A minimum of 8318 grade 8 bolts will carry bearing assembly if attached to a vertical plate.
- e) All carrier bearings must be approved by Mid Florida Tractor Pullers Association.

Maximum tire size not to exceed 30.5x32.

MINI ROD (BLOWN)

- Maximum weight 2050#.
- Any automotive type engine, with only two valves per cylinder and must accept a stock crankshaft. Maximum cubic inch is 575, with supercharger.
- 3. Supercharger limit is 10-71 thru 14-71, limited to 45% overdrive and 8-71 and smaller with 65% overdrive. Single staged turbochargers permitted.
- 4. No portion of tractor shall exceed 8'feet forward of the center of the rear axle. Width shall not exceed 6'feet in width.
- 5. Maximum tire size is 18.4x16.1 with a maximum of 143"inch circumference

mounted on a 18"inch wide rim and inflated to 10psi.

- 6. Maximum of 13"inch hitch height. Maximum lenght of 6"inch.
- 7. Mini Rods must meet all shielding and safety criteria for driveline shielding with the following additions:
 - a) All mini rods must shield the transmission with a minimum of .125 steel or titanium. Shield must cover the full width of the transmission (minus the reverser) top and both sides while open at the bottom in a "U" shape over the transmission. Shield not to exceed one inch air gap between shield and transmission. Shield must be attached at the top forward to the engine plate or engine and at bottom to each side of the chassis or be allowed a SFI 4.1 transmission blanket attached in the same fashion.
 - b) All mini rods must have a drive line tether to be center of driveline length. Tether must be constructed of a minimum of 2"inch wide by 3/32"inch thick nylon strap. Tether must attach to one side of the frame then to the driveline shield then go to the other side of the frame by a minimum of one 3/8" grade 5 bolt at all three points of attachment. Strap must have metal grommets for each bolt to pass through.
 - c) Driveshaft shielding:
 - l) All drive train, excluding additional manual transmissions must be enclosed in 5/16"inch minimum steel or 3/8"inch aluminum, round, inside diameter not to exceed 2"inch more than the outside diameter of the largest u-joint fastened every 6"inch or closer with a 3/8"inch or larger bolt (grade 5) or butt and seam welded and securely mounted to the vehicle frame. Applies to all vehicles with exposed driveshafts. No more than 1/4"inch of end of driveline shall be visible with driveline shielding in place. NOTE: If u-joints are used in any driveshaft application, the shielding must be 5/16"inch steel or 3/8"inch aluminum with 1/8"inch steel insert in aluminum. The insert must be a minimum of six"inches wide.

II) All mini rod engine/automatic transmission combinations must have:

2 front engine mounts, 2 rear engine mounts and a support saddle for rear of transmission with 1/2"inch maximum clearance OR 2 front engine mounts, support saddle at rear of engine with a 1/2"inch clearance and a mount at the rear of transmission.

MINI ROD (SMALL BLOCK) NATURALLY ASPIRATED

1. Vehicle Chassis:

- a) 2050lb Max Weight. Maximum width of 6'feet. Maximum lenght of 8'feet from the center of rear axle to furthest most point-forward weights included.
- b) All power to be transmitted through the rear wheels. No four wheel drives, dual tires, chains or studs.
- c) Any type of traction control is strictly prohibited.
- d) Maximimum tire size 18.4"x16.1"
- e) Working brakes on the driveline or on rear wheels are mandatory.
- f) Shielding:
 - I) Driveline brake components, if used, must be shielded 360degrees with 5/16"inch steel or 3/8"inch aluminum.
 - II) All driveline components must be shielded 360degrees with 5/16"inch steel or 3/8"inch aluminum. Shielding shall be securely fastened.
 - III) Engines must have side shields minimum .060"inch thick, steel or aluminum. Shielding to be entire length of block from 2"inch below crankshaft to the head/block mating point.
- g) Chassis must have wide front axles with front wheels tracking within rear wheels.
- h) Vehicle must have a fender between the driver and the tires that consists of a solid barrier. The fender must be a minimum of 1"inch over the height of the tires and must extend 4"inches horizontally from the inside edge of the tire in the same configuration as the tire.

Page 31

i) Drawbar:

- I) Drawbar to be constructed of 1"inch solid steel. Thickness around the hole must be .75"inches thick and no greater cross section thickness of .75"inches. Hitching device constucted of one piece solid steel which has a minimum thickness of 1.00" inch with a minimum of .500. No tubing permitted. Minimum of .50"inch hitch/pull pin.
- II) Drawbar must be rigid in all directions.
- III) Point of hook to be a maximum 13"inch high from the ground and must be horizontal NOT vertical.
- IV) Point of hook to be a minimum of 6"inches from the center of rear axle.
- V) Drawbar must have a 2"minimum round hole maximum size of 2.25"inches.

j) Stabilizer Bars:

- I) Stabilizer bars must have pads where they meet the ground.
- II) Pads to be a minimum of one-half the tire diameter rearward from the rear axle centerline.
- III) Pads to be maximum of 6"inches above the ground. One pad to be on each side of vehicle.
- IV) Drawbars and stabilizer bars must not be connected.
- V) Each stabilizer bar must be able to support weight of vehicle.
- VI) Vertical bumper bars that extend rearward a minimum of 2" inches behind the rear most part of the tires are required.
- VII) Front skid bars are mandatory on all tractors.
- k) Weights must not extend rearward beyond rear most part of tires.
- Vehicles must be equipped with a properly secured racing type seat, or fabricated equivalent.
- m) Tractor must have a deadman throttle of positive mechanical type, with two return springs. Throttle must move forward/down to open and rearward/up to close the throttle. All foot throttles must have a toe strap.
- n) Vehicle is required to have a kill switch that interrupts the

- n) Vehicle is required to have a kill switch that interrupts the ignition and electric fuel pump circuits. Kill switch to be located 18"inches above the point of hook and within 6"inches off center in any direction. Kill switch must have solid steel or aluminum ring of a minimum 2"inch diameter and 1/8"inch cross section thickness.
- o) All tractors will be required to have a rear mounted back-up light activated automatically when the transmission is in reverse. The light must be a minimum of 2"inches in diameter and be white in color. Lamp to be mounted near the kill switch and be clearly visible to the hook person.

2. Clutches, Flywheels, Transmissions:

a) Vehicles equipped with any type of clutch must:

- I) Use of blowpro of bellhousing having no non-factory holes. Exception: Bellhousing may have a clutch maintenance of inspection hole and one 1"inch cooling hole.
- II) Be equipped with a block saver plate of 3/16"inch steel or 1/4"inch aluminum.
- III) Use only steel or aluminum components. No cast iron components permitted. Components defined as flywheel, pressure plate, floaters, and clutch discs.
- b) Automotive transmissions must have a securely fastened SEMA or equivalent approved safety blanket or safety shield covering the transmission and torque converter. Any flex plate used must be SFI approved.
- c) Vehicle must have positive reverse gear lockout and neutral safety switch. The switch must prevent the engine from starting in gear.
- d) Vehicle must have an operating reverse gear.

3. Engine

 a) Induction must be naturally aspirated - No superchargers or turbo chargers allowed.

- b) Vehicle allowed one engine with maximum of eight cylinders, and two valves and one spark plug per cylinder. Small block Maximum displacement of 410 cubic inches.
- c) Engine heads and blocks may be aluminum or cast iron. No LS, SB2, or R07 series heads allowed.
- d) Bore spacing on all blocks must be factory stock as intended by the OE manufacturer.
- e) Sheet metal intake manifolds are permitted. Mechanical Fuel injection is permitted.
- f) Only passive data asquisition devices are permitted (data recorder)
- g) Harmonic Balancers:
 - Steel harmonic balancers are recommended.
 - II) Factory OEM type units, if used must be shielded with 5/16"inch steel 360degrees and have a cross strap a minimum of 1" wide.

 This strap must be made from 1/8"inch steel or 1/4"inch aluminum and securely fastened
 - III) SFI approved balances or hubs of steel do not require shielding.
 - IV) A bolt is required in the end of the crankshaft to hold the balancer or hub.
- h) All exhaust systems must discharge vertically or within 10 degrees in any direction of being plumb. The height shall be a minimum of 8"inches above the bend in the pipe.
- i) Only electric engine cooling fans are allowed.

4. Fuel

- a) Legal fuels are gasoline and alcohol only. All forms of nitro-methane, including nitrous oxide and propylene oxide are illegal.
- 5. Protective Safety Equipment.
 - a) Driver must wear a helmet and fire suit in good condition.
 - b) Vehicle must have a minimum of two hoops of aluminum or steel rollover bars over the driver that are securely fastened to the frame and must be able to support the weight of the entire vehicle.

- c) Vehicle must be equipped with an automotive style lap belt seatbelt. SFI 5 point harness is recommended.
- d) Vehicle must be equipped with a fuel shutoff.
- e) Vehicle must be equipped with an operational fire extinguisher.

SUPER MODIFIED 2-WHEEL DRIVE TRUCKS

- Maximim weight of competition vehicle is 6200#.
- 2 Maximum wheelbase on all trucks is 165"inches regardless of body type.

 Air or hydraulic devices to raise or lower the front of the chassis is prohibited.
- 3. The 15'feet from center of axle overall rule will apply to all TWD trucks with the exception of a 10"inch over length allowance for cosmetic fiberglass only. No steel structure, reinforcement, or steel bumpers allowed past 15'feet.
- 4. Maximum width of vehicle is 96"inches.
- 5. Any automotive type engine, with only two valves per cylinder and must accept a stock automotive crankshaft. Maximum cubic inch limit 575.
- 6. Maximum supercharger limit is 14-71 hi-helix. No screw type superchargers permitted.
- 7. Maximum bore spacing is 5.00"
- 8. All burst panels must face away from driver.
- Electronic control devices or programmable boxes for ignition timing are prohibited.
- 10. Any mass produced truck style body produced after 1936 may be used,

all other bodies will be subject to a 200# weight reduction.

- Fiberglass bodies are accepted.
- Flip top bodies must have escape hatch through roof. If body has doors they must be in position and closed.
- 13. Truck beds must be covered during competition.
- 14. Grills, hoods and fenders must in place as intended by the manufacturer.
- 15. Clear or factory tinted windows must be in place.
- 16. Only 1/4"inch Lexan .060 steel or 3/16"inch aluminum are the only materials allowed for firewalls. No plexiglass firewalls permitted.
- 17. All vehicles must have vertical bumpers. Bumpers must extend minimum or 8"inch vertically. Bottom of bumper to be a maximum of 24"inch from the ground.
- 18. No fuel tanks, fuel lines, pressure gauges or pumps allowed in cabs. All hydraulic lines in cab must be shielded top and sides with a minimum of .060 aluminum.
- 19. Non-planetary rear ends must run axle covers.
- 20. Weights cannot extend more than 12"inches from drawbar.

LIMITED PRO DIESEL 4X4 TRUCKS

1. Maximum weight 8000#lbs.

- 2. The OEM chassis is mandatory. The vehicle must retain the full OEM chassis. Wheel tubs, back-half conversions, tube chassis are prohibited. Maximum wheelbase 158"inches and 102"inches maximum width (outside tire to outside tire). Rigid suspension allowed. Hydraulic steering is allowed.
- 3. The body must be an OEM truck body, including the complete OEM floor pan and must retain complete OEM firewall. Complete bed floor, hitch is allowed to protude thru the bed floor w/minimum amount of floor removed. No flatbeds permitted. The body must retain the full sheet metal, aftermarket steel hoods are permitted. The hood must be closed and securely latched while hooked to the sled.
- 4. Maximum engine size will be 460 cubic inch. Engines must come from factory in one ton or smaller diesel pickup truck. Engine must remain in stock location as intended by manufacturer. Engines may be interchanged between manufacturers.
 - a) No aftermarket blocks permitted.
 - b) Head must be OEM or OEM one piece cast replica for that brand engine. No billet heads of any material. Outside dimensions of cylinder head must measure factory width and length. Head must retain OEM valve angle.
- 5. Front of engine block can be no farther forward than 17" inch of center line of front axle.
- 6. Engine must have cable surrounding block and head. Cable must be minimum 3/8"inch diameter located between cylinders #1 and #2. Cable must pass thru manifolds. Cable will have 4-6"inch of slack with a minimum of 4 cable clamps at splice.
- 7. All engines will have a deflection shield, running the complete length of the block casting. Shield must be securely fastened and must be .060"inch thick. (This equates to a steel inner fender).

- 2. The OEM chassis is mandatory. The vehicle must retain the full OEM chassis. Wheel tubs, back-half conversions, tube chassis are prohibited. Maximum wheelbase 158"inches and 102"inches maximum width (outside tire to outside tire). Rigid suspension allowed. Hydraulic steering is allowed.
- 3. The body must be an OEM truck body, including the complete OEM floor pan and must retain complete OEM firewall. Complete bed floor, hitch is allowed to protude thru the bed floor w/minimum amount of floor removed. No flatbeds permitted. The body must retain the full sheet metal, aftermarket steel hoods are permitted. The hood must be closed and securely latched while hooked to the sled.
- 4. Maximum engine size will be 460 cubic inch. Engines must come from factory in one ton or smaller diesel pickup truck. Engine must remain in stock location as intended by manufacturer. Engines may be interchanged between manufacturers.
 - a) No aftermarket blocks permitted.
 - b) Head must be OEM or OEM one piece cast replica for that brand engine. No billet heads of any material. Outside dimensions of cylinder head must measure factory width and length. Head must retain OEM valve angle.
- Front of engine block can be no farther forward than 17"inch of center line of front axle.
- 6. Engine must have cable surrounding block and head. Cable must be minimum 3/8"inch diameter located between cylinders #1 and #2. Cable must pass thru manifolds. Cable will have 4-6"inch of slack with a minimum of 4 cable clamps at splice.
- 7. All engines will have a deflection shield, running the complete length of the block casting. Shield must be securely fastened and must be .060" inch thick. (This equates to a steel inner fender).

diameter metallic ring to attach the sled.

15. Fuel systems:

- a) Maximum of one P7100 pump, limited to one plunger per cylinder. The use of multiple high pressure common rail fuel pumps is allowed. Ford Powerstroke engine may utilize a second HPOP. Electronic fuel injection is permitted. A 3-way dump valve mounted before the injection pump is mandatory which can be operated by the driver while strapped in the seat.
- 16. No Fuel lines or tanks permitted inside of truck cab unless securely mounted in marine box.
- Fuel limited to diesel fuel. No alcohol, nitrous, propane or any oxygen enhancing agents allowed.
- 18. Must run DOT approved tire. Maximum tire height 35"inches, no studded tires or chains. No alteration to DOT tires allowed. Dual rear wheels are permitted on rear axle only. Maximum of 6 tires.
- 19. Front weights must be no more than 60"inches from the center line of the front axle to forward most point and be securely fastened. No weights are allowed in cab of the truck. If weights are located in the bed of truck they are to be securely fastened to the bed of the truck.
- Drivetrain will consist of the following: Any front axle, any transfer case and any rear axle. No planetaries permitted.
- 21. Axle shields are required. Shield to be .060" thickness steel or aluminum. Shield not to be mounted to axle ends or hub bolts. A hole may be cut in one to allow locking in of hubs.
- 22. No cast iron clutches or flywheels permitted, must be SFI approved. Trucks with automatic transmissions, refer to General Rules.

- 23. SFI bellhousing blankets and/or SFI blow proof bellhousing required.
- 24. All u-joints must be shielded 360degrees with 3/8"inch thick aluminum with 1/8"inch steel liner or 5/16"inch thick steel. Shield will be 6"inches long minimum and centered on u-joint. Inside diameter of shield will be no more than 2"inches larger than u-joint.
- 25. All intermediate shafts between the transmission and transfer case will be totally enclosed in 3/8"inch aluminum or 5/16"inch steel, 1/4"inch of shaft may be visible.
- 26. Fire extinguisher (2.5#) or fire suppression system, Helmets Snell 90 or better, SFI fire suits, head sock, gloves, shoes, and seatbelts required.
- 27. All other rules may be found in "4x4 Truck" and "General Rule" section.

HOT ROD SEMI

- 1. Maximum weight for competition is 20,000#.
- 2. Truck must be stock appearance for that year, model and make of truck.
- 3. If hood is consisted of fiberglass an additional piece of either .125 steel or aluminum shall be placed inside hood where turbochargers are located.
- 4. Tubular chassis are not permitted.
- 5. One commercial truck engine only permitted. Engine must have been available in road use trucks. No noncommercial or specialty engines permitted. (QSK-19 has been approved for competition). Its required that a 3/8"inch cable surround the head (s) and engine block. Maximum deck plate height allowance 1.25"inch.
- Electronic fuel injection permitted with a maximum of one turbocharger.

- 7. Two (2) air stages maximum are permitted on engine.
- 8. Transmissions and rear ends must be commercial truck factory components.
- 9. Automatic transmissions must be covered by an approved scatter blanket.
- 10. Vehicles are required to have steel flywheel and clutch components. No cast clutch components permitted. All bell housings must be covered by approved scatter blanket.
- 11. Mechanical clutches only will be permitted.
- 12. Vehicles are required to have a starter interrupter switch, which will only let vehicle start in neutral.
- 13. Batteries must be located and mounted outside of driver's compartment.
- 14. A diverter valve that will permit fuel to return to the fuel tank in the case of an emergency is required.
- 15. Pressurized tanks, bottles, or cylinders are not permitted with the exception of air supply tanks used for air brake equipment.

16. Drawbar:

- a) Drawbar must be mounted to the frame.
- b) Maximum hitch height is 18"inches. Drawbar must adjust between 16" and 20"inches.
- c) Minimum drawbar length is 34"inches from center of the rear axle to the farthest point on hitch, and no longer than 30% of the wheelbase.
- d) Drawbar must be equipped with a 3"x3.5" inch round hole and free from any obstructions during hitching.
- e) Hook point may not be more than 2"inches from back edge of drawbar.
- f) Drawbar must be designed with a minimum of 3"inches of total

material at any point.

g) Pivot pin must be greater than 1"inch in diameter.

h) No chains or cables permitted as drawbar.

15. Kill Switch:

- a) Safety switch will activate the air shut off and will be within 12"inches
 of drawbar.
- b) Vehicles that have electric fuel pumps will have switch connected to kill switch to stop fuel being pumped to engine.

 vehicles must have master electrical disconnect clearly visible to official.

 d) Engine ignition and fuel supply master switches must be within easy operating reach of driver for disconnect.

16. Tires:

- a) DOT tires only. Maximum tire size to be 11x24,5 or 10x22. Maximum tread width not to exceed 10"inches.
- b) Must have dual wheels and dual tires on rear axles. Only "Bud" type wheels permitted.

c) No chains or cables permitted.

 d) Cut tires are not allowed. No construction/agricultural or "bar" type treads permitted.

17. Axles & Suspension:

- a) Tandem axle drive semi trucks will be allowed to compete.
- b) No air or mechanical lifts for steering axles are permitted.
- c) The rear axle drive must be secured to the fram to keep a constant hitch height while hooked to sled during competition.
- d) Suspension components which are used to activate front tandem axle cannot exceed 18"inches from the centerline of the axle. (air bags and hydraulic cylinders are permitted and must be mounted in the vertical position.
- e) The rear drive axle must be rigid to the frame in all directions.

 Rear axle must not move from main frame of truck.

- 18. Chaining of Axles:
 - a) The rear drive axle must be rigid to the frame in all directions. Rear axle must not move from main frame of truck.
 - b) Chain binders are not permitted.

19. Weights:

- a) Weights must not interfere with hooking of sled to drawbar.
- b) Weights cannot extend rearward more than 51"inches from the center of the rear axle.
- c) Weights cannot extend more than 24"inches from stock forward most point.
- 20. Fluid testing procedures:
 - a) Only fuel permitted is diesel fuel.
 - b) The only additive for water injection is a soluble oil. Windshield washer fluid is not permitted.

5,200lb 2WD MODIFIED

- Only one carburetor allowed. Stock bore center only. No high-pressure fuel system. 12 PSI max. No electronically controlled fuel system.
- 2. Gasonline only. No alcohol, no oxidizer.
- Special hitches allowed Maximum 28"inch hitch height. Hitch must be minimum of 30"inch from center of rear axle to hitch point. Eyehook, minimum 3"inch diameter horizontal.
- 4. No trick hitches. Drawbar must be rigid in all directions.
- Open exhaust allowed (in safe direction only).
- No dual wheels.

- 7. Planetary rear ends permitted.
- 8. Weights must be secured safely. No weights in cab.
- 9. If truck bed is cut out, bed cover required.
- 472 cubic inch engine limit. Naturally Aspirated. No aluminum blocks.
 No magnetos, engine and sheet metal must match.
- 11. No tunnel ram manifolds or sheet metal intakes.
- 12. Maximum wheelbase: 140"inches.
- 13. Maximum frame length 15"feet from center of rear axle to furthermost point at front of vehicle. Tow hook not to exceed 6"inch beyond 15' frame measurement.
- Truck frame required. Fiberglass bodies allowed. All trucks must have front and rear fenders.
- No aftermarket gear box (ProFab-SCS-etc.) No aftermarket modified transmission gear kits.
- DOT approved tires. Cut allowed Max DOT tire size 19.5x44. Max bar tire size 34x18.
- 17. Fuel cell must be in back bed of truck.
- 18. Cylinder heads permitted/allowed: Chevy (GM) Any conventional head with 24 degree valve angle. Cobra Jet, Super Cobra Jet, A-429 style, Blue Thunder, A-460, For Motorsports or Trick Flow, and Mopar that doesn't have canted valves.
- 19. Cylinder heads NOT permitted: Pontiac and Pontiac style, Franks 12

degree spread port or similar, Brodix Big Duke or similar, Dart Big Chief, Ford Thor, Hemi'99 or Pro Stock, and NRC. No billet heads permitted.

All decisions by track judges/tech officials are final. Refer back to your general rules for more information.

Please read general and safety rules for all that apply to this class. All safety equipment required as described under safety rules and regulations of the Mid Florida Tractor Pullers Association.

6,200lb 4WD PRO STOCK

- 1. Trucks may be entered in one class and one time only.
- Only one carburetor allowed (NO split carburetors). No electronic fuel management systems.
- 3. Gasoline only. (NO oxygenating fuel or additives).
- 4. Special hitches allowed Maximum 26"inch hitch height at hook point. Hitch must be minimum of 36"inch from center of rear axle to hitch point. Hitch angle can not exceed 25degrees in angle. (Add tab to rear end for easy measurements). Hitch supports or adjusters must be center of rear end or lower.
- 5. No tunnel ram or sheet metal intakes. Cast intakes only.
- Open exhaust allowed. Upright okay, if down exhaust, headers should be run in a safe direction.
- No dual wheels.
- 8. Any brand engine in any truck.
- 9. Weight bar cannot extend forward more than 60"inches from center of

front axle. (Axle must be in stock location, you cannot relocate wheel wells).

- 10. If truck bed is cut out, bed cover required.
- Back of engine block must be located no closer than 12"inches from center of front axle. (Axle must be in stock location, cannot relocate wheel wells).
- 500 cubic inch engine limit. Naturally aspirated. No aluminum or pro stock blocks. Only production style blocks which came from manufacturer.
- 13. Maximum wheelbase: 136"inches . Maximum width rear 8'feet, front 8'feet 6"inches.
- 14. Truck frame required. May be reinforced. No rear springs required.
- 15. Aftermarket gear box and transfer case allowed.
- 16. May use airbags in suspension. No controls inside cab or access to driver while driving (under green flag).
- Radiator must be within the confines of the body of the truck. (In engine compartment or the bed area, not in the cab).
- 18. No fuel tanks or batteries in driver compartment.
- 19. Trucks using standard transmission with gear stick in cab must have a 5/16"inch chain or 2"x 1/8"inch strap in place.
- Fiberglass bodies and lift-up bodies are allowed. Lift-up bodies must have a lock on the lift to prevent falling.

- 21. Cylinder heads intake port configuration of OEM and accept OEM intake manifolds. No NHRA, IHRA or drag type pro-stock heads permitted. Except Fords will be allowed "A" type of cylinder heads or their replicas and Dodge will be permitted "B-1" type cylinder heads or their replicas. GM heads use conventional heads of 23degrees or more. Only head other than these are SR20 Brodix require 485ci or less. Any other head must be approved by Mid Florida Tractor Pullers Association. Conventional port designed head is classified as a head with port spacing that must be left to right. No spread port or billet heads allowed. GM style head ports must measure 4.100 max. port width and .415 max space between runners, the entire height of port spacing corners radius measurement are taken at intake manifold flange and can be smaller. \$150 protest fee to remove and check intake ports.
- 22. Tires 35"inch DOT tires, cut or 31"x15.5x15" Cepek type.
- All decisions by track judges/tech officials are final. Refer back to your general rules for more information.
- 24. Please refer to general and safety rules for all that apply to this class. All fire gloves, suits, boots, head sock and neck collar required as described under safety rules and regulations of the Mid Florida Tractor Pullers Association.

6,000LB MODIFIED 2WD

650 cubic inch max naturally aspirated. All other rules follow Mid Florida Tractor Pullers Association SM2WD rules.

8,000LB LIGHT LIMITED TURBO TRACTORS

ENGINES:

- 1. 466 cubic inch limit.
- Two valve per cylinder OEM cylinder heads only. No aluminum heads, no overhead cams, no roller cams. No re-casted cylinder heads.

- OEM exhaust and intake manifolds for that series engine. No aftermarket or custom manifolds. All exhaust pipes must discharge vertically and should be securely attached.
- Acceptable fuels are diesel and gas. Tractor must run the original stock fuel for make and model declared. Diesels only permitted to use intercooler.

TIRES:

Maximum 24.5x32 rear tires.

TURBO AND EXHAUST:

- The inlet at the face of the turbo wheel not to exceed three (3) inches across. Exhaust measurement at the face of the wheel not to exceed four (4) inches. MWE groove of 3/16"inch permitted.
- 2. Turbocharged engines must have two bolts (minimum of 3/8"inch).
- 3. Turbo buyout rule: In order to maintain competitiveness and to keep costs low, ALL Light Limited tractors competing on a consistent basis (more than two pulls in a given year) are required to abide by the following buyout rule. If another puller believes you have more invested in your turbo than the maximum allowed \$4500.00, then that person has the right to purchase your turbo off of your tractor at the end of the pull for \$4500.00. Failure to comply (i.e. saying you will not sell your turbo) will result in a one-year suspension from pulling. This suspension applies to the driver and the tractor. The person (buyer) wanting to buy the turbo must have cash or a certified check for the amount of \$4500.00. If the buyer does not have cash or a certified check at that time, the turbo does not have to be sold until the buyer can produce the money at a future pull. It is the seller's responsibility to remove the turbo for the buyer. The turbo-buyout rule does not include any plumbing that leads to or from the

turbo, only the turbo itself. The turbo cannot be bought more than one time in six months.

FUEL SYSTEM:

- 1.The largest fuel system allowed will be a P-pump (P-3000 or P7100 with 13mm plungers) or A-pump with maximum of 14mm plungers. Tractors must have an operator-controlled fuel shut-off or dump valve to stop the flow of fuel to the injector pump. Water injection is allowed.
- 2. A fuel pump buyout rule will also apply with the same guidelines as the turbo buyout rule. If another puller wants to purchase your injection pump off your tractor for \$4500.00 then he/she has the right to. If the person refuses to sell the injection pump, then he/she will not be allowed to pull for one year. This one-year suspension applies to the driver and the tractor. The buyer must have \$4500.00 in cash or certified check at the time of purchase. It is the seller's responsibility to remove the injection pump for the buyer. Time buyout rule only covers the injection pump; no injection lines, brackets, gears, or injectors are included. The fuel pump cannot be bought more than one time in six months.
- Fuel and water sampling valve required, positioned as close to pump as possible.

CLUTCH AND FLYWHEEL:

- All tractors must have a SFI-approved roll cage and SFI approved clutch and flywheel. SFI chassis, clutch, hitch and all other safety rules apply.
- 2. All other general rules apply.

6,250lb LIGHT LIMITED SUPER STOCKS

WEIGHT

1. Tractor weight will be 6250lb

ENGINE:

 Engine crankcase, block and cylinder head must be of same manufacturer, or factory replacement and can be used in any agricultural transmission and rear end that used that brand of engine, or through its company mergers used that brand of engine.
 Example:

> CNH=Case Farmall International CaselH Ford New Holland

- 2. Must be OEM engine block, no Billet steel or aluminum blocks.
- 3. Engine must match brand of tractor.
- 4. Rear of engine must be in stock location for make and model of rear end and transmission housing, with a maximum tolerance of a 1"inch adapter plate.
- A 1% tolerance will be given on cubic inch limitations to allow for normal engine wear.
- 6. No V-8 Engines permitted.
- No overhead cams allowed.
- 8. The largest fuel system allowed is a "P"-pump with one plunger per cylinder and one injector per cylinder.
- 9. No P-pump larger than a P7100.

- 10. No electronically controlled fuel system allowed.
- 11. No seconday source of fuel (liqued or gas) or oxygen enhancer allowed.
- Water injection allowed with oil lubricant only, no additives allowed in injection water, and water will be subject to testing.
- Computer can only be used for data acquisition, may not be able to control engine timing, or fuel delivery.
- 14. No traction control.
- 15. Exhaust must be discharged vertically; no rain caps or curved pipes at outlet allowed, and exhaust pipes must be securely fastened to tractor.
- 16. Exhaust pipes must have two 3/8"inch grade 5 bolts set within 1"inch at 90 degrees to each other at least 1'foot below opening in the exhaust.
- 17. Harmonic balancer must be shielded with at least 1/8"inch metal underneath the front of the block and secured to the frame with four 3/8"inch bolts.
- 18. Engines must have one 3/8"inch safety cable completely surrounding the block and head passing between the first and second cylinders, through the exhaust manifold port area, with a minimum of four clamps at all splices with 4-6"inches of slack.
- 19 Diesels must have a spring-loaded closing mechanism air shutoff. To be deemed acceptable, when activated. The shutoff mechanism must prevent boost of engine. The kill switch must be mounted securely to the back of the tractor and have a 2"inch diameter ring (minimum 1/8"inch thick). Operator must also be able to operate from the driver seat.

- 20. Alcohol engines must have a kill switch to disable the ignition.
- Diesel fuel system must have manual three-way dump valve installed ahead of the injection pump, to be operated by the operator from the driver seat.
- 22. Must have "Dead Man" throttle with two return springs that automatically returns to idle when released by operator.
- No mechanical fans allowed.
- 24. Flywheel will be made of steel or aluminum and be SFI approved, absolutely no cast iron allowed, and all clutch assemblies will be steel and SFI approved. NO cast iron.

DIESEL ENGINE OPTIONS:

- Maximum of 315 cubic inches for twin turbocharged diesel engines with intercoolers. (Turbo(s) must be staged). This engine combination can run a maximum of two (2) 3x4 smooth bore turbo(s). No MAF enhancement.
- Maximum of 360 cubic inches for twin turbocharged diesel engines and no intercooler or after cooler allowed. (Turbo(s) must be staged). This engine combination can run a maximum of two(2) 3x4 smooth bore turbo(s). No MAF enhancement.
- Maximum of 410 cubic inches for single turbocharged diesel engines. Intercoolers allowed.
 - a) This engine combination can run a maximum of one (1) 3x4 turbo with MAF enhancement.
 - b) 0.200 MAF enhancement.
 - c) No forward facing MAF

- Maximum of 470 cubic inches for single turbocharged diesel engines. No Intercoolers allowed.
 - a) This engine combination can run a maximum of one (1) 3x4 smooth bore turbo or a maximum of one (1) 3x4 turbo with MAF enhancement. 0200 MAF enhancement
 - b) No forward facing MAF.

ALCOHOL ENGINE OPTION:

- 1.Maximum of 370 cubic inches for single turbocharged alcohol engines. No intercoolers allowed
 - a) This engine combination can run a maximum of one(1) smooth bore 3x4 turbo.

TURBO RESTRICTIONS:

- 1. All turbo compressor and exhaust wheels must protrude into the housing no less than 1/8" on an inch.
- 2. The compressor wheel must measure no larger then 3"inch at the face of the wheel.
- 3. 0.200 MAF enhancement is to be placed in the neck of the compressor housing in the factory location.
- 4. Diesel engines that will be allowed to run a 3.4"inch smooth bore turbo, the compressor wheel must protrude into the housing 1/8" of an inch and the compressor wheel must measure no larger then 3.400" at the face of the compressor wheel.
- No superchargers allowed.
- 6. Turbocharger(s) must be under stock hood or shrouded end to end and 360 degrees around with .060" thick metal. Turbocharger(s) must also be shrouded if under a fiberglass or plastic hood.

CYLINDER HEADS:

- Cast iron OEM cylinder heads only. No billet or re-cast cylinder heads allowed.
- 2. Cylinder head must match the engine block.
- Valves must maintain the factory angle, lateral movement of valves ONLY. Valves must seat in the bottom of the OEM head on all 6 cylinder engines.
- 4. Cylinder heads are limited to two (2) valves per cylinder.
- One spark plug per cylinder ONLY.
- Only one (1) plate will be permitted between the top of the block and the bottom of the cylinder head, with a maximum thickness of 1-1/8".

CHASSIS:

- Maximum length 13'feet measured from center of rear axle to forward most point, excluding tow hook.
- 2. Maximum wheelbase 114"inches.
- OEM tractor rear end, bell housing, transmission and axle housings only will be accepted, no component tractors allowed.
- No type of front-end suspension will be allowed; swivel axle front ends will be accepted.
- 5. Allow tractors with cast tub (belly) type frame (i.e. Oliver, Cockshutt, White) to remove complete frame from front of transmission housing. The engine and clutch housing to remain in original location and mounted solid as intended by original manufacturer, with motor mounts in the front and rear of the engine.

- 6. No engine cradles.
- 7. Once the tub is removed the rear of the engine cannot exceed 60"inches from the center of the rear axle.
- 8. Tractors that have removed the tub (belly) type frame will be required to have 100lbs of non-movable weight mounted onto the belly of the tractor.
- Oliver style tractors must also run a SFI 6.2 or 6.3 bellhousing with SFI
 inspection sticker in place. If they continue to run the OEM bellhousing they
 will be required to run a 6 buckle 4.1 SFI rated blanket.
- 10. All housings must stay in place, bolted ridged in all other chassis.
- 11. Auxiliary transmission will be permitted.
- 12. Skid plate must be mounted in-line with each frame rail and extend from the center of the front axle forward (on both sides) equal in strength to frame rail material. Skid must be securely mounted and braced to the chassis. Skid plate surface to be minimum of 4"inches wide and 12"inches long with a minimum 6"inch curve when measured from the front most part of rolled edge. NOTE: Skid plate must be able to support weight of the front end when checked with jack. Maximum ground clearance is bottom of wheel rim not to exceed 4"inches with front tires in normal operating position.
- 13. Tractors must have a full running frame rail from the axle housing to the front of the tractor or tie bars running from the axle housing to the frame. The tie bars must be able to support the weight of the tractor with all of the bolts from the transmission housing removed.

HITCHES:

- 1. All hitches will be minimum 3-1/2"inches long X minimum 3"inches wide at the hook point. Vertical thickness of hitch will be maximum of 1-1/2"inch minimum 1"inch cross-sectional thickness. Hitch will be no shorter than 18"inch measured from the center of the rear axle to the hooking point.
- 2. Maximum hitch height 20"inches.
- 3. Wheelie bars independent of hitch. Must be able to lift tractor with jack under pad in heaviest class tractor participates in. Pad to be no more than 10"inches above ground and should be minimum length of 32" inches from center of axle when set at the 10"inch maximum height.

TIRES:

- Maximum tire size 30.5x32.
- 2. Minimum tire size 24.5x32.

FUEL:

- 1. Acceptable fuels are diesel fuel, alcohol and gasoline.
- 2. No oxygen carriers or combustion accelerators will be permitted.
- 3. No ether starting aid can be on tractor.

SAFETY:

- Complete fire suit, fireproof gloves, head sock and fire shoes are required. Must meet SFI spec 3.3c. All drivers will be required to use a SFI approved 3.3 neck collar.
- 2. All competitors will wear a full-face helmet. Snell 2005 rating or better.

- 3. All tractors will have SFI approved clutch/flywheel assembly. No cast iron.
- 4. All tractors will use a six buckle 4.1 SFI approved safety blanket.
- 5. A safety light system is required. A white automotive quality light, minimum of 2"inches in diameter, must be directly mounted above or below the safety kill switch at the rear of the tractor.
- The light is to be activated by a shift lever such that it will only be illuminated when the tractor is in reverse.
- 7. Must have at least 2-1/2lb fire extinguisher and be convenient to the operator.
- 8. Roll cage is required to meet SFI 47.1 requirement. 5 point SFI harness is required.
- 9. Side panels, firewall and fenders are required on all tractors.
- 10. Fenders must be constructed so that when the driver is secured in the competition position no part of the driver's body can touch the tire.