# 2016 Michindoh Truck and Tractor Pull Association Rules

Rules as of 1/29/2016

### General Rules:

1. Michindoh Classes are: 5,800lb. 2wd Gas (100% pay back)

6,000lb. Stateline Pro Street 4x4 (points class)

6,200lb.2wd Super Stock (points class) 6,200lb. 4wd Altered Stock (points class) 8,500lb. Pro Farm Tractors (points class) 9,500lb. Hot Farm Tractors (points class)

5,500lb Michindoh Modified Rails (points class)
7,800lb. 2.5 Work Stock Diesel Trucks (points class)

- 2. If at the end of a given pulling season, any point's class that had an average number of entries less than 3 over the course of that season. That class will be transitioned to a 100% payback and will not be a point's class for the following season or may be dropped.
- 3. Class rules will not change throughout the current year unless there is a safety issue with a rule. The decision of the board to change a rule deemed to be a safety issue will require a majority vote of the board.
- 4. All drivers and vehicles in Michindoh classes must be paid Michindoh members and possess a Michindoh pulling vehicle number.
- 5. Classes will have a random pulling order from event to event.
- 6. Drivers in all classes must be entered before the start of the pull. Late entries for all classes: If not registered ½ hour before posted start time, you will be fined \$20.00 for late entry fee.
- 7. If you cannot be at the pull on time, you may pre-enter by contacting someone who can be there on time.
- 8. If you break before your class starts, your entry fees will be refunded.
- 9. NO refunds after class starts.
- 10. The driver who is on the entry form MUST be the driver in the vehicle. If a substitute is required, you must notify Michindoh officials before the vehicle is pulled up to the sled.
- 11. Drivers that make a full pull MUST be the drivers in the pull off. NO substitution will be allowed or the pull will be disqualified.
- 12. For general safety, the Head Tech Official and/or class tech official may inspect a vehicle at any time. This includes, but does not limit to: pumping for cubic inch, checking the fuel system and any safety item, under the hood or in the drive train. All owners/representatives of all vehicles at any pull site must allow an inspection to be done in his presence. A random pump ball will be used during registration to select who will be pumped. Anyone who refuses will be in direct violation of this rule and will be subject to disqualification under protest teardown rules.
- 13. Only the official operating the pump and the owner of the vehicle being pumped will be allowed near the vehicle while being pumped.

- 14. As soon as the sled returns and/or the start line officials call you, drivers must be ready to pull. The driver will have THREE MINUTES to hook to the sled and tighten the chain. After this time, the pull will be forfeited.
- 15. Contestant will be allowed 2 attempts to start the sled within the first 100 feet of the pull, at the discretion of the starting flagman. Only2 attempts allowed to start the sled in the event of a pull off. Vehicles' are not allowed to return to the pits if involved in a pull off.
- 16. The total weight of the pulling vehicle includes driver.
- 17. Driver's meeting- takes precedence over all written rules.
- 18. Idle speed only while driving in pit area.
- 19. All electric fuel pumps must be connected through the kill switch.
- 20. All pulling vehicles must have a 3-1/4" wide x 3-3/4" deep opening due to NTPA rule changes on weight transfer hooks.
- 21. All pulling vehicles must have reverse lights (white lights) and neutral start switches. Light should be mounted near hitch. This is mandatory for all classes.
- 22. There will be no "gimme" hooks for any driver or vehicle.
- 23. All vehicles must have a fire extinguisher.
- 24. Board of Director has precedence over all.
- 25. All drivers must wear approved helmets and seat belts.
- 26. All drivers must have valid state drivers license.
- 27. An owner cannot change vehicle and keep same vehicle number and or transfer points.
- 28. With an incorporated safe shut down area, all tracks will be 300 ft long whenever possible. Rather than starting a class all over, the head judge and sled operator may utilize some of the shut down area to extend the finish line to a floating finish if the sled is set properly, as long as the sled will stop the class within 30 ft of the original finish line. A pulling track may be shortened from 300 ft, to maintain a 100 ft minimum shutdown.
- 29. Vehicles must have a one piece, 1/4" hydro form bell housing on any straight shift. If any modifications are made, modified area must be ground smooth inside and out. All vehicles using a clutch and flywheel assembly will run a full block saver plate of 1/8" steel, with all bolts possible installed. Each vehicle owner will sign a waiver on the membership form stating that they are running a SFI approved flywheel. Diesel powered vehicles are exempt from this rule. All flywheels must be steel or aluminum and SFI approved. No cast stock flywheels allowed.
- 30. All automatic transmissions must have SEMA approved scatter blanket
- 31. Block spacers to accommodate multiple disc clutches must be as substantial as the block flange to retain flywheel. This will be at the tech official discretion.
- 32. All vehicles must have easy and ample access to hitch to hook chain.
- 33. All Reese style hitch inserts must be a class 5 or solid insert. With no movement in any direction.
- 34. Any engine to be pumped or torn down is allowed 1% max tolerance, due to inaccuracy of our measuring devices.
- 35. All vehicles must have working hydraulic brakes capable of sliding the tires when applied.

## **Michindoh Points System**

The point's structure is as follows:

1 <sup>st</sup>	30 points	11 <sup>th</sup>	20 points
2 <sup>nd</sup>	29 points	12 <sup>th</sup>	19 points
$3^{rd}$	28 points	13 <sup>th</sup>	18 points
4 <sup>th</sup>	27 points	14 <sup>th</sup>	17 points
5 <sup>th</sup>	26 points	15 <sup>th</sup>	16 points
6 <sup>th</sup>	25 points	16th and lower will receive 15 points	
7 <sup>th</sup>	24 points		
8 <sup>th</sup>	23 points		
9 <sup>th</sup>	22 points		
10 <sup>th</sup>	21 points		

To be eligible for points, the competitor must compete in a point's class, and have paid an entry fee, passed inspection, and paid full Michindoh membership dues.

On-track disqualifications (i.e. out of bounds, loss of weight, etc) will receive last place points and last place payout in class. If there is more than one entry disqualified in a given class, the last place points and payout will be divided equally among the disqualified entries.

At the end of season, all competitors will drop their lowest points placing from the season. The competitor's lowest points placing may include a missed event.

#### **Protest and Tear Down Rules:**

You may protest (if you are Michindoh member in the same class) to have any vehicle pumped the night of a pull by presenting \$100.00 to the president or vice president present. If found to be illegal by the pump, the owner may tear down the engine at their expense to prove it legal or be barred from competition for one year from violation. If the vehicle in question is found to be legal it will keep the \$100.00 pump fee.

You may also protest to have a vehicle torn down (if you are a Michindoh member in the same class). The person protesting must bring \$750.00 cash to the president or vice president present. The protest will be discussed. If the vehicle in question is to be torn down, it will have the option to do it at the track or at the nearest suitable location. The vehicle or engine will be impounded until the tear down. The tear down must happen with-in three days of the protest. If the vehicle in question is found to be legal, all protest fees will go to the owner.

Any vehicle found illegal and/or refuses to be protested or teched, will be barred from competition for one year from violation. Unless, they are willing to pay a reinstatement fee of \$500.00 to the club and prove the vehicle is legal. Any money and points won the day of the protest will be returned or withheld by the club. If the vehicle

in question refuses to refund winnings, the amount of those winnings will be added to the reinstatement fee.

The tech-official for the class has the right to check any vehicle they feel may be in violation of any rules without a protest fee with the permission of the board of directors.

## Causes for Disqualification:

- 1. Loss of anything off the vehicle (i.e.: weights, parts, etc.) while it is in motion, except in the case of breakage in the drive-line, until red flag is waved.
- 2. Loss of safety equipment or failure of safety equipment to function.
- 3. Excessive loss of liquid or steady stream, except in the case of internal breakage.
- 4. Illegal fuel and use of Nitrous Oxide.
- 5. Any part of your vehicle out of bounds from start to finish while under the green flag.
- 6. Unsafe operations of any vehicle in pits or on track (i.e.: no hole shots, excessive speed, etc.)
- 7. INTOXICATION of any driver or pit crew member or any smell of alcohol on a driver's breath.
- 8. Illegal equipment.
- 9. Leaving starting line under red flag.
- 10. Un-sportsman like conduct.
- 11. No reverse in vehicle.
- 12. If DQ for cheating, all points and money will be forfeited.
- 13. If a DQ vehicle will receive last place points in the class, and if more than 1 vehicle is DQ, they share at the bottom of the list in the same order they were otherwise. Out of bounds only.

# ALL THE ABOVE RULES WILL BE STRONGLY ENFORCED DUE TO YOUR SAFETY AND THE SAFETY OF OTHERS. THE OFFICIALS' DECISIONS ARE FINAL!

\*\*The Head of Class/Tech Official for each class will enforce all of the rules! Every vehicle will be teched on a random basis at some point throughout the season.\*\*

# 6200lb. 4wd Altered Stock Rules locked, 2016, 2017

With the exception of safety requirements approved by the board.

- 1. Hood modifications and upright headers are acceptable.
- 2. Tires must be D.O.T. approved for highway use and uncut. No recaps.
- 3. Protest rules in effect.
- 4. The decisions of the pulling officials are final.
- 5. Kill switches are mandatory. Electric fuel pumps must be wired through the kill switch.
- 6. Trucks must have a full body, no flat beds, if bed floor is removed it must be covered and not visible to spectators.
- 7. Will allow racing seat.
- 8. Fuel tanks are allowed to be in front of vehicle if they are S.F.I. and have braided hoses and pressure coupler. Batteries may be mounted out in front of the truck but battery must be enclosed. No Batteries in cab.
- 9. All drivers are required to wear full face helmets and jackets and pants with a SFI rating of 3-2a-1. Shoes also recommended.
- 10. All drivers are required to wear seatbelts.
- 11. All vehicles must have a fire extinguisher.

## Weights:

- 1. Front weights to be a maximum of 60" from center of front axle.
- 2. No loose weights in cab.

#### Hitches:

- 1. Maximum hitch height is 26 inches, & minimum 42 inches from center of rear end maximum of 48 inches.
- 2. You must use a steel plate hook point with a minimum 3 \(^1\)4 wide 3 \(^3\)4 deep hole.
- 3. Pivot point of hitch cannot be forward of center of rear axle. It must be below top of frame rails, and hook point must be behind frame rail or body.
- 4. Hitches must be tight and have no movement in any direction.

#### Engines:

- 1. Maximum 514 cubic inch limit.
- 2. Any single four-barrel carburetor is allowed.
- 3. No turbochargers or superchargers.
- 4. No fuel injection unless factory equipped.
- 5. Cast iron block and heads only, except FORD FE allowed to run aluminum cylinder heads.
- 6. Aluminum intake may be used.
- 7. No pressurized fuels. No methanol alcohol fuel.
- 8. Front of engine block cannot extend more than 10 inches of the center of the front axle. Front axle must be in stock location.
- 9. Balancer must be S.F.I. approved or covered 360 degrees with 1/4 steel.

### Transmissions & Drivelines:

- 1. Maximum wheel base 134 inches center to center.
- 2. Stock type one ton or two ton drive-lines are permitted. No planetary.

- 3. Drop box's are allowed.
- 4. May block frame solid. MUST HAVE u-joint covers & drive shaft loops on front & rear drive shafts.
- 5. Must have scatter proof bell housing or automatic transmission blanket, and S.F.I. flywheels

# **5800# 2WD GAS**

## **Rules Locked 2016**

With the exception of safety requirements approved by the board.

### **Engines:**

- 1. Engine must be naturally aspirated.
- 2. Maximum size 478 cubic inch. 1% tolerance, naturally aspirated V8 engine.
- 3. OEM cast iron block and cast iron heads only.
- 4. Single four-barrel carburetor. 4150/4160 flange style maximum. No Dominators.
- 5. Aluminum intakes allowed must accept 4150 flange. No 4500 series intakes.
- 6. The front of the engine block cannot extend more than 160 inches forward of the center of the rear axle or 20 inches forward of the center of the front axle.
- 7. Balancer must be S.F.I. approved or covered 360 degrees with 1/4 steel.
- 8. Roller-cams allowed.
- 9. Gas only. No methanol alcohol fuel.

### Hitches:

- 1. Maximum hitch height of 30 inches.
- 2. Minimum 36 inches behind center of rear axle.
- 3. Maximum 48 inches behind center of rear axle.
- 4. Pivot point of hitch cannot be forward of the center of the rear axle.
- 5. Must be rigid at all hook points.
- 6. Must be no smaller than 3 ¼ wide 3 ¾ deep hole at hook point.

### Wheels and Tires:

- 1. Can run any D.O.T. uncut tire. No recaps.
- 2. Maximum tire height of 35 inches and a maximum width of 14 inches.

### Transmission and Drive Lines:

- 1. Stock altered frames, no tube chassis.
- 2. Maximum wheel base of 140 inches center to center.
- 3. All U joints and yokes must have 360-degree covers, 6 to 10 inches long, and be .125 inches thick steel or .25 inch thick aluminum. Covers must be attached with a minimum of 2 grade 5, 3/8 inch bolts.
- 4. Drive shaft loops required. A minimum of 2 grade 4, 3/8 inch bolts must be used to attach loops to frames.
- 5. Bell housing must be covered by one of these methods:
  - a. Scatter-proof bell housing (Manuel transmission)
  - b. Transmission blanket (Automatic transmission)
- 6. S.F.I. approved flywheels required.
- 7. One ton or less differential.

### Weights and Safety:

- 1. Weights can be mounted anywhere on the truck in a safe manner, no lose weights in cab.
- 2. Weights cannot extend more than 60 inches forward of the front axle.
- 3. Driver must wear a seat belt.
- 4. Batteries must be in a protective case if outside body no batteries inside the cab.
- 5. Must have working kill switch on rear of truck must kill electric fuel pump.
- 6. Brakes must hold truck.

- 7. Must have a radiator overflow.
- 8. Drivers must be 16 years of age and have a valid driver's license.
- 9. Hood required covering as much area as possible.
- 10. Engine side shields required unless inner fenders are installed.
- 11. Nerf bars at least 8 inches behind clevis or body to prevent damage.
- 12. Must have wheelie bars, maximum ground clearance of 6 inches and minimum of 18 inches behind rear axle.
- 13. Fuel tanks are allowed to be in front of vehicle if they are S.F.I. approved and have braided hoses and pressure coupler.
- 14. All drivers are required to wear full face helmets and jackets and pants with a SFI rating of 3-2a-1. SFI shoes are recommended.
- 15. All vehicles must have fire extinguisher.

# 6200lb. 2wd Super Stock

### **RULES LOCKED 2016, 2017, 2018**

With the exception of Safety requirements approved by the Board.

### Engines:

- 1. Maximum single 485 cubic inch 1% tolerance, naturally aspirated V8 engine.
- 2. Cylinder heads: two valves and one spark plug per cylinder. Aluminum heads are allowed. No less than 24 degree head. No Hemi heads.
- 3. Legal aluminum heads: CHEVROLET: dart-320, 360, and Pro 1, Brodix 1 & 2, and all Edelbrock. FORD: Cobra jet, Blue Thunder and TFS A460. CHRYSLER: Indy 444-1. Not limited to these heads, but must meet A & B.
- 3a. Must have cast aluminum manifold.
- 3b. Must except stock rocker arm assembly.
- 4. The front of the engine block cannot extend more than 160 inches forward of the center of the rear axle or 20 inches forward of the center of the front axle.
- 5. One carburetor, gasoline only, no pressurized fuels, no methanol.
- 6. Balancer must be S.F.I. approved or covered 360 degrees with ½ steel.

### Hitches:

- 1. Maximum height 30 inches.
- 2. Minimum 36 inches behind center of rear axle.
- 3. Maximum 48 inches behind center of rear axle.
- 4. Pivot point of the hitch can not be forward of the center of the rear axle.
- 5. Must be rigid at all hook points.
- 6. Must be no smaller than a 3 \(^1\)4 deep 3 \(^3\)4 wide opening at the hook point.

### Tires & Wheels:

- 1.Can run any size street legal DOT tire. Maximum size 35x12.50 or 315-70-16 metric. Can run 34X18.0X15 rear pulling tires allowed.
- 2. No split rims; snap rings or dual wheels.

### Transmissions & Drivelines:

- 1. Stock altered frames. No tube chassis.
- 2. Maximum wheel base 140 inches center to center.
- 3. All u-joints and yokes must have 360 degree cover, 6 to 10 inches long, and 125 inch thick steel wall (no exhaust pipe). Aluminum must be .250 inch thick & attached with grade 5-3/8 bolts & a minimum of 2 required.
- 4. Solid drive shaft loops required. Must be fastened with at least 2 grade 5-3/8 bolts.
- 5. Must have a fully enclosed S.F.I. approved explosion proof bell housing on standard transmission.
- 6. Must have S.F.I. approved flywheels for both automatic and standard transmissions.
- 7. Automatic transmissions must have S.F.I. approved flywheel shield and transmission blanket, or tunnel shield.
- 8. Any rear axle is allowed.

### Weights & Safety Rules;

- 1. Weights can be mounted anywhere on the truck in safe manner. No Loose weights in cab.
- 2. Weights cannot extend more than 60 inches forward of the center of the front axle, or any part of the truck.
- 3. Driver must wear seatbelt.
- 4. Batteries must be in protective case and must have a battery disconnect switch on outside if mounted in front. No batteries in cab.
- 5. Must be mounted and working fire extinguisher in the cab.
- 6. No gas tanks in the cab.
- 7. Must have working kill switches and they will be checked.
- 8. Brakes must hold vehicle.....steering brakes are allowed.
- 9. Must have radiator overflow.
- 10. Drivers must be at least 16 years of age and have a valid driver's license.
- 11. No car bodies, vans, blazers, broncos, or fiberglass bodies allowed. With fiberglass hoods being the only exception.
- 12. Hood required covering as much area as possible.
- 13. Engine side shields required (.100 for steel and .125 for aluminum), unless inner fenders are installed.
- 14. No holes in firewall or floor larger than 1 inch.
- 15. Balancer must be S.F.I. approved or covered 360 degrees.
- 16. Nerf bars at least 8 inches behind clevis or body to prevent injury.
- 17. Fuel tanks are allowed to be in front of vehicle if they are S.F.I. approved and have braided hoses and pressure coupler.
- 18. 2wd- must have wheelie bars. Maximum ground clearance of 6", and 18" behind rear end.
- 19. All drivers are required to wear full face helmets, jackets, pants with a SFI rating of 3-2a-1and 3.3/5 shoes recommended.

# 6000 lb. Stateline Pro-Street 4wd

### Rules locked 2016, 2017, 2018

### General Rules:

- 1. Drivers must wear approved full face helmet, approved fire jackets and pants with a SFI rating of 3-2a-1, and seatbelts, SFI shoes recommended.
- 2. Cowl induction hood allowed-No open holes.
- 3. Tires must be D.O.T. approved for highway use 33x12.50 inches, or 305-70-16 metric maximum tires size. No cut tires, No boggers. No recaps.
- 4. One ton driveline or less, u-joints, driveshaft, rear end, transmission and transfer case. Trucks must have complete suspension in factory location with at least 1" of travel but may be temporally blocked to pull. All rear-end bars must be forward of rear axle.
- 5. No special bumpers, snowplow hook ups, or brush guards. Front bumper must be in stock location and nothing protruding beyond the bumper.
- 6. The decisions of the pulling officials are final.
- 7. Trucks must have reverse lights of some sort.
- 8. Points Class
- 9. Must have drive shaft loops and U-joint covers, scatter-proof bell housing or blanket, and a kill switch.
- 10. Any unsafe manner of vehicle (on or off track) will be disqualified.
- 11. Top 3 placing trucks may be teched after pull. Any truck in violation will forfeit placing and hook fees, Tear down and protest rules apply.
- 12. Fuel cells can be added but must be secured inside the bed or under the bed.
- 13. All drive lines in factory location, maximum wheelbase 134 inches. No narrowing of the front or rear axle, 3 rear leaf springs minimum. (No moving axles or transmission or engines).
- 14. Truck must have a full body. No gutting of truck. Trucks must have full bed and a solid floor made of metal or wood with rear inner fenders and all factory glass. No flatbeds.
- 15. Any truck that has been lightened in any way may be penalized by adding weight to the rear of the vehicle at the discretion of the tech official.
- 16. All vehicles must have a fire extinguisher.
- 17. Must have working brakes on all 4 wheels.

18.no batteries in cab.

### Weights:

1. Weight can be added, but must be secured and not visible in the front of the vehicle. Weight must be secured and can be visible in the bed of the truck.

#### Hitches:

- 1. Hitch is to be no more than 20 inches off the ground, and hook point must be 42 inches minimum from center rear axle. All vehicles must have easy and ample access to hitch to hook chain. Pivot point of hitch cannot be forward of center of rear axle and must be below top of frame rail. No bars or chains from hitch to axle. All bars or hitch components must fasten to the frame rail only. Hitch opening must be 3 ¼ wide by 3 ¾ deep.
- 2. Hitches must be tight and have no movement in any direction.

### Engines:

- 1. Maximum 472 cubic inch, naturally aspirated. Engines must be in factory location.
- 2. Single four barrel carburetor, maximum 4150 flange allowed. No Dominator, King Demon, or predator carburetors allowed.
- 3. No fuel injection.
- 4. Cast iron block and heads must be used. No aluminum blocks or heads. All blocks and heads must have OEM part number. No Merlin, Dart, Bowtie, or SVO parts. No hemi heads.
- 5. Aluminum intakes are allowed.
- 6. Headers are allowed. All exhausts must run through the muffler and be at least to the rear of cab.
- 7. No magnetos.
- 8. Electric water pumps are allowed.
- 9. Race fuel is allowed, No alcohol, LP, or Nitrous oxide.
- 10. All engines are required to have a S.F.I. approved balancer and flywheel.

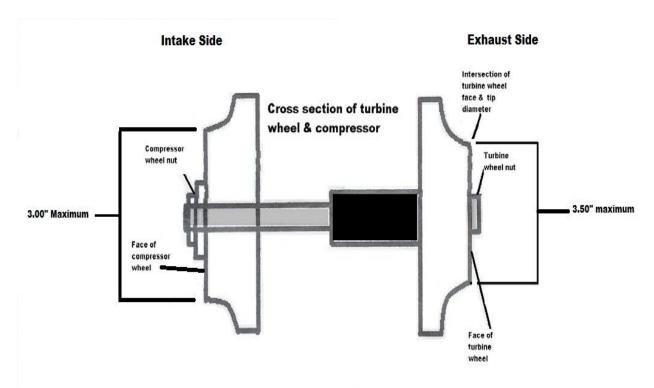
# 9,500lb. Hot Farm Tractors

## Rules locked 2016, 2017, 2018

With the exception of safety requirements approved by the board.

### Engines:

- 1. Maximum 540 cubic inch limit, 1% tolerance.
- 2. Water injection is allowed. No oxygen carriers or combustion accelerators allowed. Water only.
- 3. Factory after cooler allowed. AGRICULTURE/OEM USE ONLY.
- 4. Turbo limited to 3" inlet, 3 1/2" outlet.
  - a. Compressor wheel must protrude into the 3" bore at least 1/8 inch.
  - b. All turbine wheel blades must protrude into the 3.5 bore at least 1/8 inch
  - c. Intake and exhaust will be measured at the intersection of the wheel face and tip diameter.
  - d. No variable geometry turbo.
- 5. No additional openings in compressor housing outside the 3" opening. MWE groove is allowed to be open no more than .200.



- 6. Factory cast iron cylinder head and block, no aluminum or deck plates.
- 7. Diesel fuel only, no additives or pressurized fuels, NTPA fuel guidelines 409.
- 8. Stock appearing manifolds, intakes and exhaust.
- 9. Maximum of two valves per cylinder.

- 10. Engines must be from same manufacturer and must bolt in stock location without modification.
  - a. Any and all engine upgrades must not cross manufacturer's lines and must be approved by class members and Board of Directors.
    - i. Class members and Board of Directors have approved the use of a 12 valve 5.9L Cummins in an Oliver 16xx-18xx series chassis.
- 11. Mechanical fuels systems only. No computerized or electronically controlled fuel systems. No ice on board.

### Hitches:

- 1. Hitch height is maximum of 20 inches.
- 2. Must be within 18 inches to 30 inches behind the center of the rear axle.
- 3. Must be ridged with no movement in all directions.
- 4. No more than 11/2 inch difference between hitch mounting point and hitching point.
- 5. Hook hole is required to be a minimum of  $3\frac{1}{4}$  wide  $3\frac{3}{4}$  deep opening ID (allow ample room for person hooking the chain).

### Tires & Wheels

- 1. Maximum tire size 20.8/38.
- 2. Cut tires are allowed.
- 3. Front tires must track rear tires.

### Safety:

- 1. Emergency air shut-off is mandatory (must be easily accessible to person hooking the chain).
- 2. If equipped with an electric fuel pump, tractor must have a electric kill switch wired to the emergency air-shut-off.
- 3. Must have a mandatory manual three-way dump valve ahead of the injection pump, to be operated by the driver.
- 4. Must have fire extinguisher that is within reach of the driver.
- 5. Must have working, individual rear brakes. Must have needle bearing cross in differential.
- 6. Must have wheelie-bars.
- 7. Must have clutch blanket or steel shield installed 270 degrees 3/8 inch thick, and 12 inches wide.
- 8. Seat belts required.
- 9. Roll over protection mandatory. 3 bar roll cage manufactured from 2" ODx.120 wall.
- 10. Must have a steel flywheel and clutch assembly.
- 11. Side shields-Engine side shields are mandatory. Shields must be solid and minimum of .060" thick steel, or .120" thick aluminum.
  - a. All in line engines are required to have an additional inner side shield consisting of .125" thick steel, or .250" thick aluminum inside the current side shields. This shield is independent of the current shield and must extend from the bottom of the head to the centerline of the crankshaft and extend the full length of the block on each side of the engine.
- 12. All inline turbocharged engines are required to have one 3/8" or larger cable that surrounds the engine block and head. This cable must be placed between the first and second cylinder. Cable must have 2 clamps at the splice and have no more than 4" of slack.

- 13. Tie-bars securing front frame rails to rear axle housing are mandatory.
- 14. All drivers are required to wear full face helmets and jackets and pants with SFI rating of 3-2a-1 and shoes with a SFI 3.3/5 rating.
- 15. Must have 2-3/8" bolts in a cross pattern installed in exhaust pipe.
- 16. Front skies are mandatory. All tractors must have skid plates mounted in line with each frame rail and extended from the center of axle forward (on both sides) equal in strength to frame rail material. Skid must be securely mounted and braced to the cassis. Recommended skid surface to be a minimum of 4 inches wide and 12 inches long with a minimum of 6 inches curve when measured from the front of most part of rolled edge. Maximum ground clearance is bottom of wheel rim not to exceed 4 inches with front tires in normal position.

### Appearance:

- 1. Tractor must be in stock appearance, hoods, grills, & fenders, (except injection pump & after cooler).
- 2. All tractors that utilize tube ladder-type frames must be covered on outside with steel or aluminum 0.060 thick.
- 3. Maximum wheel base is 114".
- 4. Maximum length is 13' from center of rear axle to forward-most part of tractor, including weights, not including front hitch.
- 5. Stock bell housing, stock transmission housing, and stock final drive housing or manufacture's replacement. No component chassis.

## 8,500lb. Pro Farm Tractors

## Rules locked 2016. 2017, 2018

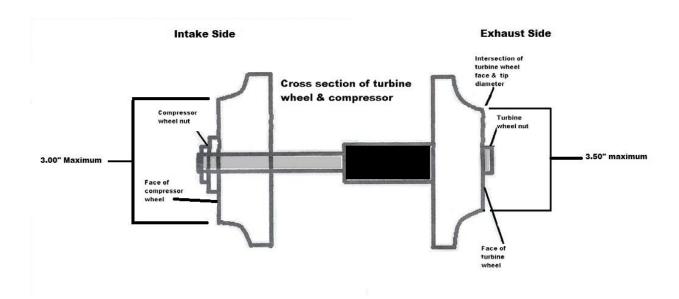
With the exception of safety requirements approved by the board.

### Weight:

1. 8,500 lbs

### Engines:

- 1. Maximum 510 cubic inch limit, 1% tolerance.
- 2. Water injection is allowed. No oxygen carriers or combustion accelerators allowed. Water only.
- 3. Turbo are limited to 3" inlet x 3.5" outlet.
  - a. Compressor wheel must protrude into the 3" bore at least 1/8 inch.
  - b. All turbine wheel blades must protrude into the 3.5" bore at least 1/8 inch.
- c. Intake and exhaust will be measured at the intersection of the wheel face and tip diameter.
  - d. No variable geometry turbo.
- 4. No additional openings in compressor housing outside the 3" opening. MWE groove is allowed to be open no more than .200.



- 5. Factory cast iron cylinder head and block no aluminum and no deck plates.
- 6. Diesel fuel only, no additives or pressurized fuels, NTPA fuel guidelines 409.
- 7. Stock appearing manifolds, intake and exhaust.
- 8. The largest fuel injector pump allowed will be a Bosch P series pump with only one plunger per cylinder.
- 9. Maximum of two valves per cylinder.

- 10. Engines must be from same manufacturer and must bolt in stock location without modification.
  - b. Any and all engine upgrades must not cross manufacturer's lines and must be approved by class members and Board of Directors.
    - i. Class members and Board of Directors have approved the use of a 12 valve 5.9L Cummins in an Oliver 16xx-18xx series chassis.
- 11. Mechanical fuels systems only. No computerized or electronically controlled fuel systems. No ice on board.

#### Hitches:

- 1. Hitch height is maximum of 20 inches.
- 2. Must be within 18 inches to 30 inches behind the center of the rear axle.
- 3. Must be ridged with no movement in all directions.
- 4. No more than 1 1/2 inch difference between hitch mounting point and hitching point.
- 5. Hook hole is required to be a minimum of 3 \(^1\)4 wide 3 \(^3\)4 deep opening ID.

#### Tires & Wheels:

- 1. Maximum tire size 18.4/38.
- 2. Front tires must track rear tires.

#### Safety:

- 1. Emergency air shut-off is mandatory (must be easily accessible to person hooking the chain).
- 2. If equipped with an electric fuel pump, tractor must have an electric kill switch wired to the emergency air-shut-off.
- 3. Must have a manual three-way dump valve ahead of the injection pump, to be operated by the driver.
- 4. Must have fire extinguisher that is within reach of the driver.
- 5. Must have working, individual rear brakes. Must have needle bearing cross in differential.
- 6. Must have wheelie-bars.
- 7. Must have clutch blanket or steel shield installed 270 degrees 3/8 inch thick, and 12 inches wide.
- 8. Seat belt required.
- 9. Roll over protection mandatory. 3 bar roll cage manufactured from 2" OD x .120 wall.
- 10. Must have a steel flywheel and clutch assembly.
- 11. Side shields Side shields are mandatory. Shields must be solid and minimum of .060" thick steel, or .120" thick aluminum.
  - a. All in line engines are required to have an additional inner side shield consisting of .125" thick steel, or .250" thick aluminum inside the current side shields. This shield is independent of the current shield and must extend from the bottom of the head to the centerline of the crankshaft and extend the full length of the block on each side of the engine.
- 12. All inline turbocharged engines are required to have one 3/8" or larger cable that surrounds the engine block and head. This cable must be placed between the first and second cylinder. Cable must have 2 clamps at the splice and have no more than 4" of slack.
- 13. Tie-bars securing front frame rails to rear axle housing are mandatory.

- 14. All drivers are required to wear full face helmets and jackets and pants with SFI rating of 3-2a-1. Shoes SFI 3.3/5 required.
- 15. Must have 2 3/8" bolts in a cross pattern installed in exhaust pipe.
- 16. Front skies are mandatory. All tractors must have skid plates mounted in line with each frame rail and extended from the center of axle forward (on both sides) equal in strength to frame rail material. Skid must be securely mounted and braced to the cassis. Recommended skid surface to be a minimum of 4 inches wide and 12 inches long with a minimum of 6 inches curve when measured from the front of most part of rolled edge. Maximum ground clearance is bottom of wheel rim not to exceed 4 inches with front tires in normal position.

### Appearance:

- 1. Tractor must be in stock appearance, hoods, grills, & fenders.
- 2. All tractors that utilize tube ladder-type frames must be covered on outside with steel or aluminum 0.060 thick.
- 3. Stock bell housing, stock transmission housing, and stock final drive housing or manufacturer's replacement. No component chassis.
- 4. Maximum wheel base is 114".
- 5. Maximum length is 13' from center of rear axle to forward-most part of tractor, including weights, not including front hitch.

# 2.5 WORK STOCKDIESEL 4X4 7,800 LB

This class is designed for pickup trucks with a wide variety of performance upgrades. The truck must be 4 wheel drive.

## **Ballast**

- 1. Hanging front weights and weight boxes (with weights only) are permitted. If used, ballast must be securely fastened.
- 2. Weight or weight bracket must not extend more than 60 inches from the center line of the axle. Final decisions rest with the technical department.
- 3. Weights and brackets must be removable by hand.

### **Batteries**

1. The batteries must be securely mounted. They may not be located in the driver compartment or forward of the radiator core support.

# Body

- 1. The body must be the OEM truck body including the full bed floor.
- 2. The body must retain full sheet metal.
- 3. The complete OEM firewall and complete OEM floor pan is mandatory.
- 4. A factory installed pickup bed or commercial style aftermarket bed must be installed.

## **Brakes**

1. Four wheel hydraulic functional brakes are mandatory.

## Chassis

- 1. The OEM chassis is mandatory
- 2. The engine must be in the OEM location.
- 3. The vehicle must retain the full OEM chassis.
- 4. Wheel tubes, back half conversions, tube chassis, etc, are prohibited.

# Cooling system

1. Radiators must be in stock location and be of at least stock size.

## Credentials

1. All drivers must have a valid state drivers license.

### Driveline

1. An OEM transmission and transfer case are mandatory. They must have been an option on a one ton or smaller pickup.

# **Driver Restraint System**

1. The OEM restraint system or **SFI 5 point harness** is mandatory and must be worn with a DOT approved seat.

# Driveshaft Loops

- 1. All trucks must have at least (6) inch wide u-joint shields around all u-joints on rear drive shaft, constructed of at least ¼ steel or 3/8 aluminum that will safely contain the u joints and the ends of the drive shafts.
- 2. Any u-joint on the front axle that can be seen from the front or side of the truck must be shielded the same as all other u-joints.
- 3. All shields must be securely mounted to the vehicle.

# Engine

- 1. The engine is limited to a stock appearing OEM compression engine, available from the factory in a one ton or smaller truck.
- 2. Cubic Inch limit of 444CI
- 3. Block must circulate coolant freely. No hard filled blocks. Water pumps may be factory or electric powered.
- 4. All factory belt driven accessories, excluding the air conditioning compressor, must be retained and powered via the crankshaft by a standard serpentine "v" belt. Electric cooling fans are permitted.
- 5. No individual runner intake manifolds. (Example: ZZ-customs.). Belt driven alternator. No deck plates. EXAMPLE: NO HAMILTON HEADS FOR THE CUMMINS AND NO BRODIX HEADS FOR THE DURAMAX.

## **Exhaust**

- 1. All vehicles must be equipped to direct exhaust upward. The exhaust must exit rearward of the drivers compartment. Stacks exiting through the fender well and hood are prohibited.
- 2. Two (2) 3/8 inch diameter bolts must be installed through exhaust pipe in a cross pattern within one (1) inch of each other and as close to the turbo as possible. This will be teched. Bolt heads welded to the pipe or sheet metal screws to mimic this will be disqualified.

# Fire Extinguisher System

- 1. A fire extinguisher system is permitted, it must be securely mounted.
- 2. All must have at least a 2 ½ lb extinguisher with a working gauge mounted within drivers reach.

### Fuel

- 1. The fuel must be pump #1, #2 diesel or Soy/Biodiesel. Fuel must be commercially available.
- 2. A fuel cell may be used in place of the factory fuel tank, but must be mounted in factory location or securely mounted in bed, no fuel tank in cab.

# Fuel Injection Pump

- 1. The fuel injection pump is limited to cylinder number specific (i.e. 6 cylinder pump on a 6 cylinder motor).
- 2. The use of multiple high pressure common rail fuel pumps or HPOPs are permitted.
- 3. P pumps that are allowed are the p3000 and the p7100. Ag governors are allowed.
- 4. No Sigma or 12 cylinder pumps allowed.

### Harmonic Balancer

1. All engines must be equipped with a harmonic balancer or dampener meeting SFI Spec18.1.

## Intercoolers

- 1. Factory style or aftermarket air to air replacement only in stock location.
  - \*\*water to air coolers are prohibited\*\*
- 2. Any means of cooling the air before the engine, except the air to air cooler is prohibited. \*\*No use of ice or water\*\*

## Hitch

- 1. The hitch must be a REECE receiver-style hitch.
- 2. Reinforcements are permitted. Reinforcements must not extend forward of the center line of the rear axle and must remain inside the frame rails.
- 3. The hooking point must be the rear most point on the vehicle and must be rearward of the stock location of the tailgate.
- 4. The hitch must be horizontal to the ground and stationary in all directions. Bumper may be notched or removed.
- 5. The hitch height from the ground may not exceed 24 inches.
- 6. The hooking point must have a minimum of 3 ¼ wide by 3 ¾ deep opening for sled hook.
- 7. The hooking point must be a minimum of 44 inches from the center of the rear axle, to the end of the hole where the hook touches metal to be pulled from, this is the hooking point.

### Kill Switches

- 1. All trucks are required to have a kill switch located on the back of the truck, located near the hooking point.
  - a. On trucks with an electric injection fuel pumps it must have an electric shut off or disconnect for the injection pump on the back of the truck.
  - b. Trucks with a manual injection pumps must have an air guillotine of the spring loaded type, no butterfly type to kill the air intake to the engine. It is recommended to have an air shut off on all trucks.
  - c. Kill switch failure will result in disqualification.

# Nitrous Oxide/Propane

- 1. Nitrous Oxide, propane, or other oxygen extenders are prohibited. All system components must be removed from the truck.
- 2. No pressurized bottles.

## Rear End

1. Non OEM rear end housings are prohibited. The rear end housing must have been for a one ton or smaller pick up. Rear axle bolts must be covered with a cap or shield.

# Safety Equipment

- 1. All drivers are required to wear full face helmets, jackets and pants with a SFI rating of 3-2a-1, and SFI rating SFI 3.3/5 shoes recommended.
- 2. Seat belts are required.

# Steering

- 1. The vehicle must retain the full, original OEM, factory steering gear.
- 2. The vehicle must retain the original OEM power assistance, if it was so equipped.
- 3. Additional stabilizers are permitted.
- 4. Non OEM power assist methods are prohibited.

# Street Equipment

- 1. Complete headlamp and tail lamp assemblies are mandatory and must be operative, except the right front headlamp may be removed for air inlet to engine.
- 2. Complete OEM windshield and all other windows are mandatory.
- 3. Driver window must be able to operate per factory specifications (open and close).

# Suspension-Front

- 1. The factory suspension configuration must be retained.
- 2. Modifications to the front suspension that would alter the original location(i.e. moving it forward or backward) is not permitted.
- 3. Strut tower braces, lower tie bars, sway bars, and limit straps are permitted.
- 4. Traction bars and devices are permitted
- 5. Air shocks are prohibited.

# Suspension-Rear

- 1. An OEM style suspension is mandatory.
- 2. Traction bars and devices are permitted, they must be bolt on only, welds are permitted for attachment to frame or axle housing. Traction bars if installed must have a chain or cable or some type of safety device mounted one (1) foot from the front support to catch the bar in case of failure.
- 3. Control arms may be strengthened or replaced, providing all original mounting points are retained and used.
- 4. Sway bars, lower tie bars, limit straps, and camber kits are permitted.
- 5. The rear suspension can be solid with a removable block.
- 6. Air bag spring assist and air shocks are prohibited.

### Tires

- 1. The tires must be DOT street tires
- 2. Cut tires are prohibited.
- 3. The vehicle must retain the original factory wheelbase and track width.
- 4. 35x12.50 inch max.
- 5. No chains or studs.
- 6. Single tires. No duals.

## Transfer Case

1. Non OEM transfer cases are prohibited. It must have been an option on a one ton or smaller pick up truck.

# Transmission-Automatic

- Non-OEM transmissions are prohibited. The transmission must have been an option
  for a one ton or smaller truck. Aftermarket torque converters, valve bodies and
  internal components are permitted. Transmission brakes are prohibited. Any nonOEM floor mounted automatic shifter must be equipped with a spring-loaded positive
  reverse lockout device to prevent the shifter from accidently being put into reverse.
- 2. A functional neutral safety switch is mandatory. Vehicle must not start in gear.
- 3. All transmission lines must be metallic or high pressure type hose.
- 4. All automatic transmissions must be equipped with a transmission shield meeting SFI Spec 4.1 and must be labeled accordingly. A blanket type shield must be used and appropriately labeled as meeting SFI Spec 4.1 and must extend from the rear of the engine block to the rear of the tail housing with a minimum of six (6) inch overlap where it is fastened.
- 5. All vehicles using an automatic transmission must be equipped with a flex plate meeting SFI Spec 29.1.

### **Transmission-Manual**

- 1. Non-OEM transmissions are prohibited. The transmission must have been an option on a one ton or smaller truck. Aftermarket internal components are permitted.
- 2. A clutch meeting minimum SFI Spec1.1 or 2.1 is mandatory on all engines.
- 3. All manual transmissions must be clutch assisted.
- 4. Sequential shifters are prohibited.
- 5. All transmissions must have a flywheel shield labeled as meeting minimum SFI Spec 6.3 or greater.
- 6. Applications for which an SFI Spec flywheel shield is not available may use a properly attached SFI 4.1 or 4.2 blanket that completely covers the bell housing. It must attach to the rear of the engine block and extend rearward to the transmission with a minimum of six (6) inch overlap where it is fastened. All transmissions or clutch pedals will have a safety interlock switch so that vehicle will not start in gear.

# Turbocharger

- 1. S-4, GT42, HX50 and turbo of this type is the largest turbo allowed.
- 2. T-4 mounting flange is the largest allowed
- 3. No clipped wheels or step down covers.
- 4. Billet compressor wheels are allowed.
- 5. A single .200 inch MWE groove maximum allowed.
- 6. Inducer bore must be non-removable.
- 7. All air must go through the 2.5 inducer bore and MWE groove,
- 8. The wheel must protrude into the 2.5 bore 1/8 inch. Turbo checked with a 2.550 plug.
  - a. 6.4 Powerstrokes will be permitted to run modified turbos as long as the atmosphere turbo does not exceed the OEM straight bore dimension. (2.59)
- 9. No **TAPERED COVERS** will be permitted.

## Water Injection

1. Water injection is prohibited. All system components must be removed from the truck.

## Wheelbase

- 1. The vehicle must retain the original factory wheel base and track width.
- 2. Cab and chassis trucks may not exceed 172 inch center to center of axles.
- 3. Front dual-wheel spacers may be used only with accompanying positive-offset dually style wheels.

# Michindoh Mods Rules locked 2016, 2017. 2018

With the exception of safety requirements approved by the board

### 1. Weight

a. 5500 ibs.

#### 2. Driver

a. Must be 16 years of age or older

#### 3. Tires

- a. Whether U.S. or metric numbering system can be no larger than 18.4 x 38
- b. Any cut
- c. Aluminum and steel rims allowed
- d. Bias or radial
- e. No duals

#### 4. Fuel

- a. Commercial pump gas
- b. Race gas
- c. Aviation fuel
- d. No alcohol
- e. No nitrous oxide
- f. No pressurized fuel tank

#### 5. Engine

- a. American made automotive type engine no larger than eight cylinders.
- b. Maximum 500 cubic inches, 1% tolerance.
- c. Must be cast iron block, heads, with visible OEM casting number all must be same manufacturer. No after-market allowed.
- d. 2 valves per cylinder
- e. 1 sparkplug per cylinder
- f. No overhead cams
- g. Must be naturally aspirated on carburetion, dual carburetor tunnel ram allowed.
- h. Headers must exhaust in an upward direction
- i. All tractors must be carbureted with no fabricated sheet metal intakes.
- j. Distributors-any factory or aftermarket distributor can be run as long as it is MSD 6AL compatible.
- k. Ignition M.S.D. #6AL 6420 or #6ALN 6430 rev limiter box with 7200 chip Tech officials will check RPM's of the MSD box with an MSD test box and chips will be tested with the same box for success and RPM's, and shall not be any higher than 7210. If chip is over 7210 it will be automatic disqualification resulting in last place position of that event. MSD box must be mounted in a location that is

easily accessible and visible to the Tech official. Chip port must be facing an open position to get test tool on easily. Chips will be removed and checked by a Michindoh official after your pull. Then can be picked up after the class is over.

#### 6. Tractor

- a. 2 wheel drive farm type tractors only with original transmission housing attached to the rear end must have at least one forward and one reverse operable gear no planetaries no extra transmission or gearing of any kind outside of the tractor's transmission on the engine Tractor gearing can be changed.
- b. Maximum length 14" from the center of rear axle to the furthest point forward including weights.
- c. Must have a wide front end Front tires must track inside rear wheel tread
- d. Must have working brakes

#### 7. Hitch

- a. 20" maximum height
- b. Hitch point 18" minimum behind centerline of rear axle the distance behind the hitch hole may not exceed more than  $1\frac{1}{2}$ "
- c. Must be rigid in all directions
- d. Minimum opening 3 1/4 wide by 3 3/4 deep.
- e. Minimum of 1" thick maximum 1 1/4"
- f. Turn buckles or hitch adjustor cannot be higher than the center of the rear axle
- g. No obstruction 5" wide and 24" directly about hitch hole
- h. Welds and hitch construction will be inspected by Tech official for safety

#### 8. Wheelie Bars

- a. Must support weight of tractor in its heaviest class
- b. Must extend a minimum of 32" behind the center of the rear axle
- c. Pads must be a minimum of 5" inches square with trimmed corners optional and not more than 10" off the ground.
- d. Wheelie bars are to be mounted separate from hitch

#### 9. Miscellaneous

a. There will be a required driver safety enclosure, any NTPA style roll cage, or a minimum of 2" tubing or box tubing with at least 2 bars, with at least 2" of clearance between inner fenders and tires. Tubing must be a minimum of .090 thousandths of a inch wall thickness. Roll cages may be inspected and stamped by tech officials with year of inspection. Sonic test equipment for steel wall thickness may be used if needed.

- b. Dead man throttle required spring at the carburetor return to idle
- c. Ignition kill switch required must stop fuel pump and ignition must be mounted about the hitch plate must run electric fuel pump easily accessible and visible to hitch man on sled.
- d. May only use an electric fan, no engine driven fans allowed
- e. Fire extinguisher mounted within driver's reach must be readily accessible and minimum of two pounds
- f. All belts must be 360 degree shrouded with 1/16" steel or 1/8" or thicker aluminum.
  - a. Harmonic balancer (SFI preferred) must be surrounded 360 degrees by a min. 3/16" thick steel also a metal strap over the center of the balancer must be a min. of 3/16" thick and 3" wide, with a max. 1 1/8" hole for access to the crank center bolt. Max one inch by one inch hole is allowed at the timing indicator marks to allow for engine tuning. Entire enclosure must be mounted in at least 3 solid points.
- g. Universal joints, chain couplers and/or drive shaft must be surrounded 360 degree by ¼" or thicker steel (entire shaft length) from the automatic transmission to the tractor transmission. Round drive shaft cylinder required. If shaft cover is cut in half it should be bolted by 3/8 or larger of grade 5 or better bolts in reasonable spacing for safety. Tech will check over proper spacing for safety.
- h. Automatic transmission must be surrounded by a SFI 4.1 or 4.2 rated transmission blanket at least 18" in length. Blanket must be mounted to the block with no more than a 4" gap between the block and the blanket and have at least 3 straps encompassing the transmission. ¼ steel may be used instead with same dimensions applying. Must be equipped with a SFI flex plate.
- i. Everyone must run an automatic transmission with a torque converter mounted directly to the back of the engine.
- j. Side shields must be made from 1/8" or thicker steel or 1/4" or thicker aluminum must cover from front to rear of block and cover from the bottom of the head to 2" below crankshaft center line must be secured at all four corners
- k. Tractors can be driven or are allowed to be towed around in the pit area.

### 10. Driver Safety Equipment

- a. Jackets and pants with a rating of SFI 3-2a1 and shoes with a rating of 3.3/5.
- b. Full face helmet D.O.T. approved
- c. High back molded vinyl, fiberglass, or aluminum race seat
- d. Four or five point seat harness required.
- e. Automatic shifter activated reverse clear lens back up light with unobstructed view to hitch man on the sled

- f. All non barbed fittings (cooling or fuel) must be double clamped.
- g. Driver's equipment must be on tractor while being scaled. If equipment is not on vehicle tractor will not be allowed to be scaled.
- 1. Kill switch must stop ignition and fuel pump
- 2. Tractor must have a neutral start safety switch
- 3. Backup light and kill switch must be easily accessible and seen by hitch man on sled and may be checked randomly at pulls. At pulls colored tie straps will be applied to kill switch to signify that tractor has been through tech.
- 4. Tech inspection day will be set up each year if drivers would like to have their tractors inspected for safety equipment and compliance to all rules and regulations stated above. A pump will be available to check legal cubic inches by a Michindoh official.

For Technical questions please call Tyler Clifton cell #419-296-1552