

#500 to #599 MORR Stock Truck Technical Specifications

DEFINITION

- A two wheel drive pickup truck with a 3/4 ton or smaller chassis, with coil front springs, manufactured in quantities of at least 5,000 units of same model per year and available for sale in the United States. This is a stock class as defined by original equipment parts (OEM) and replacement parts made to OEM specifications only. Stock also includes options sold on the truck from the same make and model of the truck.
- All trucks, regardless of year built, must be properly constructed and maintained in presentable condition.
- Drivers must declare year/make/model of the chassis. This information will be used to enforce chassis dimensions.
- Technical specifications for this class supersedes CCR.

CHASSIS

- Chassis must remain stock but may be reinforced by adding material.
- Shortening of a long wheelbase frame to match short wheelbase specs is allowed.
- The wheelbase must be stock measurement ± 2 ".
- If rear bumpers are removable, they must use two mounts with (4) 1/2" Grade 8 bolts per side.
- Frames cannot be notched or smashed in the rear to lower ride height while maintaining wheel travel. Must be stock. Reinforcement is allowed if needed to keep it maintained.

SUSPENSION

- Stock suspension parts and locations must be maintained as delivered.
- Overall width must be in stock.
- Pivot points must remain stock and in stock locations.
- Front and rear wheel travel limit is 12" measured to metal stop. Front wheel travel will be measured at the spindle.
- Any manufacturer upper ball joint is allowed, including a mono-ball style.
- Upper spindle mounts may be spaced up a maximum of 1" to clear upper joint.
- Lower ball joints must be OEM or direct OEM replacement. No mono-ball style joints allowed.
- Lower control arms must be stock for the year of manufacture of the chassis. They may not be modified to alter the location of the lower ball joint.
- Lower control arms must be from a 2wd chassis. No 4wd versions allowed.
- Rubber/poly bump stops but must be removed to measure wheel travel.
- Reinforcement of front suspension components is allowed.

SHOCKS & SPRINGS

- Maximum of two shocks are allowed per corner.
- Air and/or coil over shocks are not allowed.
- Any type of reservoir shock, external by-pass tubes, or shocks larger than 2.0" are not allowed .
- Internal floating piston shocks are not considered reservoir shocks and are allowed.
- Rear suspension must utilize leaf springs as the only suspension springs.
- Aftermarket leaf springs are allowed, but must be stock length and mount in the stock locations.
- "Military wrap" leaf springs are allowed.
- Any leaf spring with a wrap designed to increase traction by reducing axlewrap, such as leaf springs with a "Rebound wrap" or "snail wrap" are not allowed.
- Quarter elliptical springs are not allowed.
- Shackles lengthened or moved from stock locations are not allowed.
- Composite or fiberglass springs are not allowed.
- Air bump shocks/stops are not allowed.

- Any shock or part of suspension protruding through the hood or fenders must be removed.
- Remote reservoirs are not allowed.
- Take a part shocks except those described above are not allowed.
- Custom made shocks are not allowed.
- Shocks must not be mounted in the driver compartment.
- Coil-over shocks are not allowed.
- Remote and/or cantilever shocks are not allowed.
- Air shocks are not allowed.
- Position sensitive shocks are not allowed.
- Shocks with shafts larger than 5/8" in diameter are not allowed.

STEERING

- Steering must be in stock location and components in safe working order.
- Heim joint tie-rod ends are allowed.
- Fabricated tie-rods are allowed.
- An aftermarket slip tube may be used.
- Steering quickeners are allowed.
- Any steering pump is allowed, but must be belt driven.

BRAKES

- Disc brakes are allowed front and rear, but must use steel rotors and calipers.
- Rotors and calipers must be OEM replacement, but may be from any model or manufacturer.
- Drilled and slotted rotors are allowed as long as they are OEM replacement. No two-piece rotors.
- Hubs may be redrilled to accommodate a different bolt pattern or stud size.
- Proportioning valves are allowed for front to rear bias, but all four tires must lock up when tested.

WEIGHT

- Trucks originally manufactured as less than 1/2 ton chassis style by manufacturers and using a V6 engine (mini and mid-size trucks) must weigh a minimum of 3,500 pounds.
- All full or mini/mid-sized trucks using a V8 engine must weigh a minimum of 4,000 pounds.

BODY

- Body and fenders must remain stock, absolutely no bending or flaring, especially to fenders or wheel openings.
- Body must be sourced from the same manufacturer as the chassis and engine, but may be newer or older than the chassis.
- Rear of cab needs to be retained.
- A one-piece fiberglass or plastic truck nosecone and grille assembly may be used. The assembly must have stickers matching the stock headlights and grille.
- Rear wheel wells, firewalls and floorboards must be repaired for rust as well as all other damage.
- ~~Outer box sides must be steel and have a stock appearance.~~ Box sides may be custom fabricated as long as they match the factory body lines.
- **Aftermarket box sides of fiberglass or plastic composition are allowed.**
- OEM fiberglass step-side outer box sides may be utilized if they came stock for the body model and year. ~~No reproductions allowed.~~
- Nothing is allowed above the stock bedsides besides number plates, bars, and safety light. No tinwork above the bedsides.
- Front fender wells may be removed.
- Rear fender wells may be removed.
- Flat hood only, no hood scoops allowed.

- Stock grill assembly and/or aftermarket must be an exact duplicate for the body year.
- Headlight glass must be removed and covered with flat material.
- Headlight stickers to match the body style are required.

ENGINE

- Stock cast iron components and parts only.
- No aftermarket or GM Performance Vortec heads are allowed.
- Maximum CID:
 - Ford: 362 (0.060" over 351)
 - GM: 360 (0.060" over 350)
 - Dodge: 367 (0.040" over 360)
- Engine blocks accepted are: GM 350, Mopar 360, & Ford 351 Windsor or smaller.
- The engine must be in stock position and have stock components such as fan and alternator.
- The block may be drilled for oil or temperature sending units.
- Factory street production head with factory cast marking only.
- The following stock replacement cylinder heads are allowed. The heads must remain as-cast with part numbers clearly visible:
 - Engine Quest CH350I (GM)
 - Dart Speedway Motors 91624360 (GM)
 - Engine Quest CH318B (Mopar)
 - World Products 53030 (Ford)
- Valves can be 2.02 intake and 1.60 exhaust maximum.
- GT-40P and GT-40 heads are allowed.
- Any oil pan is allowed. Oil pan must have a 3/4" inspection plug providing clear view of the crank and connecting rods.
- Engine oil coolers are not allowed.
- Aluminum blocks and/or cylinder heads even if they were available as an option are not allowed.
- Compression ratio must be under 10:1. This will be checked as a static compression check.
- External or internal modifications and/or grinding to heads is not allowed. Heads and block can be cleaned up for gasket sealing but must remain under the 10:1 compression ratio.
- Interchanging heads from other similar motors (305 to 350, 289 to 351, etc.) is not allowed.

CAMSHAFT & LIFTERS

- Must be stock type cast flat tappet camshafts with a maximum valve lift as measured at the valve of 0.500".
- Must be stock lifter bore size.
- Full roller rockers are required, stud mounted only.
- Aftermarket direct replacement timing chain and gears are allowed.
- Roller mushroom type lifters are not allowed.
- Gear or belt drive cams are not allowed.
- Shaft type rockers are not allowed, unless OEM.

PISTONS AND CONNECTING RODS

- Flat top or dished, stock, or OEM replacement piston only.
- Cast or forged pistons.
- Steel rods with stock dimensions only:
 - GM: 5.791"
 - Mopar: 6.123"
 - Ford: 5.954"
- Titanium, stainless, aluminum, etc. rods are not allowed.

- H-beam rods are allowed.
- No domed or notched pistons.
- Pistons must remain at or below deck height at TDC.

CARBURETOR & INTAKE

- One 2-barrel Holley model number 0-4412 is allowed. HP or BK models are not allowed.
- One combination restrictor plate with two 1.375" bores is required.
 - Must be used with standard size gaskets only.
 - This unit is available through Sportsman Series tech only.
 - Must have MORR stamped on it.
- Modifications to the throttle bore, plate, shaft, choke horn, booster, or Sportsman restrictor plate are not allowed.
- Breathers and air filters may be of any material or size are allowed, but must be mounted under the hood with no modifications to the hood.
- No fuel injection is allowed, even if the vehicle had factory fuel injection.
- The carburetor must pass tech gauges and measurement tools.
- No adapters or spacers are allowed. The carburetor must bolt directly to the restrictor plate. The restrictor plate must bolt directly to the intake.
- Any cast iron OEM intake manifold allowed.
- Must be as-cast Edelbrock part numbers allowed:
 - GM: 5001 or 2716
 - Mopar: 5076 or 7577
 - Ford: 5081
- GM engines are allowed to run Edelbrock intake #2716 with stock Vortec heads.
- Match porting is allowed by the removal of material only. Within the last 1/2" of the runner only.
- Use of an OEM mechanical fuel pump is required, and must be mounted in the OEM location only.
- Electric fuel pumps are not allowed.

HEADERS

- Stock, as cast, production exhaust manifolds only.
- Dual exhaust only.
- No crossover, 2 into 1, H, or X tubes.

MUFFLERS

- Unrestricted.

IGNITION SYSTEMS

- Ignitions must be OEM or PRO Comp HEI – PC6001, PC6004 or PC6006.
- Ford may use Speedway 91012360.
- The MSD Blaster ignition coil may be used.
- Aftermarket plug wires are allowed.
- An RPM limiter may be used, but is not required.

ENGINE COOLING

- Any radiator is allowed, but must be mounted in stock location.
- Core support may be removed and engine compartment can be caged in.

REAR AXLE

- Any automotive or light truck production housing is allowed.
- No aluminum gear carrier allowed.

- No aluminum wheel hubs allowed.
- Aftermarket floater axels are allowed.
- Anti-wrap up bars are not allowed.
- Spools are allowed.
- A rear axle truss may be added to the rear axle housing.

TRANSMISSION

- Transmission must be from the same manufacturer as the engine.
- Transmission coolers are allowed.
- Any steel conventional vane type, non-electric torque converter is allowed.
- Aluminum valve body is allowed.
- Factory gears only are allowed.
- Factory aluminum planetary is allowed.
- Trans brakes are not allowed.
- Aluminum torque converters are not allowed.
- Aluminum or lightened aftermarket internal parts are not allowed.

TIRES

- D.O.T. only and available to the general public.
- Maximum tire size of 33 x 12.5 or approximate metric equivalent. Tire must be 33" in diameter or less.

WHEELS

- Wheel maximum width is 8-1/2".
- Any steel wheel, or one piece cast aluminum wheel is allowed.
- Maximum wheel size is 17".
- Bead locks, bead liners, and inner liners are not allowed.
- Spun aluminum or magnesium wheels are not allowed.
- Three-piece wheels are not allowed.