

Xcel Chassis Rule Book January 2023

Doug Borger: 484-464-5319

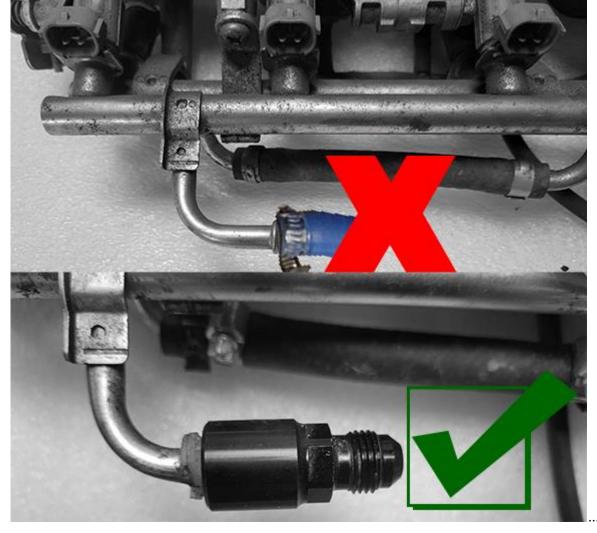
Table of Contents

Xcel Chassis Rule Book	
January 2023	C
Doug Borger: 484-464-5319	C
CAR REQUIREMENTS & RULES	5
Tires Hoosier	6
Rims	6
Hubs	7
Steering	7
Fuel Cell	7
Weight	7
Radiator	8
Gear	8
Gear Linkage	8
Brakes	8
Belly Pan	8
Gauges	c
Birdcages	g
Engine	10
Engine Protest & Claimer Policies	11
Wheelbase	11
Bumpers, Rub Rails & Nerfs	12
Muffler	12
Exhaust	12
Battery	12
Radius Rod	13
Front Axle	13
Wheel Width	13
Fuel	13
Fuel Pump	14
Shocks	14
Springs	14
Numbers & Letters	15

Qualifying	ody	15
FEATURE POINTS CHART: Rookies Feature Race Air Box Frame 2011 or Newer Cars & Cars with 2011 Updates Sponsor Sticker Locations Starts & Restarts Car Inspections Registration Pit & Track Behavior Three Strike Rule Protest Policy Miscellaneous On-Track Miscellaneous Addendum Section Diagrams Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram Start Zone Diagram	ualifying	15
Rookies. Feature Race Air Box. Frame	oint System	16
Feature Race Air Box	FEATURE POINTS CHART:	16
Air Box	ookies	17
Frame	ature Race	17
2011 or Newer Cars & Cars with 2011 Updates Sponsor Sticker Locations Starts & Restarts Car Inspections Registration Pit & Track Behavior Three Strike Rule Protest Policy Miscellaneous On-Track Miscellaneous Addendum Section Diagrams Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram Start Zone Diagram	r Box	18
Sponsor Sticker Locations Starts & Restarts Car Inspections Registration Pit & Track Behavior Three Strike Rule Protest Policy Miscellaneous On-Track Miscellaneous Addendum Section Diagrams Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram	ame	18
Starts & Restarts Car Inspections Registration Pit & Track Behavior Three Strike Rule Protest Policy Miscellaneous On-Track Miscellaneous Addendum Section Diagrams Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram	011 or Newer Cars & Cars with 2011 Updates	18
Car Inspections	onsor Sticker Locations	19
Registration	arts & Restarts	19
Pit & Track Behavior	ır Inspections	19
Three Strike Rule	gistration	19
Protest Policy Miscellaneous On-Track Miscellaneous Addendum Section Diagrams Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram	t & Track Behavior	20
Miscellaneous On-Track Miscellaneous Addendum Section Diagrams Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram	ree Strike Rule	22
On-Track Miscellaneous Addendum Section Diagrams Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram	otest Policy	23
Addendum Section Diagrams	iscellaneous	24
Sponsor Stickers Diagram Fuel Diagram Start Zone Diagram	n-Track Miscellaneous	25
Fuel Diagram Start Zone Diagram	ddendum Section Diagrams	26
Start Zone Diagram	Sponsor Stickers Diagram	26
	Fuel Diagram	26

Wheel Width Diagram





CAR REQUIREMENTS & RULES

- All cars must remain stock from Xcel Chassis
- Interpretation of rules will be at the discretion of the designated technical inspector.
- All decisions by Xcel officials will be final.
- Rules not covered such as new technology or physical advantages are not allowed without prior consent. If the rules do not explicitly state you can do something, and it creates and advantage, it is assumed that it is prohibited.
- Officials have the right to check anything on any car at any time.
- Officials have the right to amend any rule at any time for the betterment of the series.

The process of inspection including post race inspection is disussed in more detail on the Xcel Chassis website. It is recommended that all teams read that information. See XCEL TEAMS REQUIREMENTS for more information.

Tires | Hoosier

- Stock tire.
- Must be on all 4 corners.
- All tires must have an Xcel stamp.
- Right Rear 61x10x10 RD 15 or RD 20
- Left Rear & Fronts 57 x 6.5 x 10
 RD 15
- Regrooving of Right Rear stock with #2 bit.
- No siping on any tire.
- No grinding of tires at any tracks.
 - Penalty for infraction: car will start in the rear.
- No doctor pad grinding.
- Left Rear Offset: outside of Left Rear tire to frame by lower inner rub rail.
- (18" max for old style cars)
- (17" max for new style cars)
- Durometer reading must meet specifications determined by Xcel chassis officials.
- No tire dope in or on tires.

Rims

- Front and left rear 7 ½" wide maximum.
- Front 3" offset only.
- Right Rear 8 ½" wide maximum.
- No double beadlocks.
- No aluminum or titanium bolts in the beadlock rings or hubs.
- All bolts must be in wheels. 8 bolts and nuts.
- No plastic or carbon fiber wheels.
- No bleeders of any style.
- Left Rear offset: outside of Left Rear tire to frame by lower inner rub rail.
 - 18" max for old style cars
 - 17" max for new style cars

<u>Hubs</u>

• Aluminum only

Steering

- Mechanical steering only. No power steering.
- Must be rack and pinion steering from Xcel Chassis.
- No aluminum steering shafts.
- No aluminum u-joints.

Fuel Cell

- Must be stock from Xcel Chassis
- Vent Line must be secured to side and pointing down to track
- Fuel vent line requires one-way check vaulve

Weight

- Minimum weight with the driver is 900 pounds at completion of race.
- Weights must be bolted with 5/16 bolts and lock nuts.
- Weights must be painted white and have car number painted on each one used.
- All bolt on weights must be inside the main frame.

Radiator

- Stock from motorcycle only.
- Custom from Xcel Chassis only.

Gear

- Open, 520 chain
- Front gear and chain must be steel.

Gear Linkage

- All cars will enter track in the racing gear
- No Shifting during the race
- Shift capabilites disabled and locked in cockpit during racing

Brakes

- Rear braking only.
 - 2 piston caliper only
 - 1 rear brake
- Front brakes prohibited
- Wilwood #120-4062
- AFCO #6630410
- 10" maximum diameter brake disc with 4 bolt mounting hub.
- 5/16 thick maximum
- ¾" Master cylinder
- Wilwood #2606764
- US Brake #201-2512

Belly Pan

• Front must stop at the steering box.

- Back must stop at bar with serial number on it.
- Belly pan must be on top of frame rails.
- No belly pan outside the main frame rails.

Gauges

- No AIM or Micron type gauge
- Tach is only gauge that can be connected to wiring harness. Yellow with blue tracer wire.
- 3 gauges in a car
 - oil pressure
 - water temperature
 - tachometer
- Mechanical type gauges only. Digital gauges must be mechanical connections
- No more then 3 on/off switches in the car
 - First switch on/off for engine
 - Second switch fan or lights enabling sight to get in and fasten belts.
 - Third switch helmet blower (ONLY)

Birdcages

- Right Rear & Left Rear double or single bearing bird cages
- Must come from Xcel Chassis

Engine

- All engines must have current year seal before it is permitted to race.
 - Seal must be Xcel Chassis (blue with bar code)
 - If not sealed, penalties will be awarded to owner and driver.
- ECU must be reflashed from Xcel and labeled serial number.
- Stock from motorcycle, including injections, clutch, and black box.
- All engines and wiring harness must come from Xcel Chassis.
- All rebuilds are done by Xcel Chassis or Xcel Chassis sanctioned vendor.
- All engines must have 1 seal done by Xcel Chassis.
 - Unsealed engines will cause disqualification
 - Altered or tampered seals in any degree will cause disqualification
- No aftermarket devices.
- Honda CBR 600 only 2000-2006.
- Suzuki GSXR 600 only 2000-2010.
- Yamaha FZ09 only 2014-2020.
- 599 cc no cleanup.
- Honda stock fuel regulator only.
- Suzuki Xcel adj. High speed bypass.
- No pill block.
- 12 volt battery only see battery section for more
- All wiring harnesses must be removable.
- Tach Wire must be accessible to officials at all times.
 - Tach wire is Yellow with blue strip.

Engine Protest & Claimer Policies

- Included in protest are the following: engine, wiring harness, black box, everything but header and air box.
- All engine protests and claims are mandated to be pulled at the track the night the protest is made.
- Protested and/or claimed engines will be taken by Xcel shop that night and will be reteched. If a protest on a two-day race event, the protested engine will be marked by an Xcel official the first day and will be confiscated at the end of the second day.
- All protests and claims must be in writing and given to Doug Borger along with a \$500.00 protest fee and \$2,000.00 claim fee.
- Only owners can file an engine protest.
- An owner can protest one engine a night.
- In order to protest two conditions must be met:
 - Owner's car must have finished top 7 in feature.
 - Engine being protest must have finished top 7 in feature.
- Xcel Chassis receives \$100.00 of the protest money no matter the outcome.
- If found legal: owner of protested engine will receive \$400.00 and return of engine.
- If found illegal: protester will receive \$400.00, Xcel Chassis confiscates and keeps the engine, owner of the illegal engine receives monetary fine and suspension to be determined by Xcel Chassis officials.

Wheelbase

• 66 ¼ minimum to 67 ¾ maximum

Bumpers, Rub Rails & Nerfs

- Must be steel and stock from Xcel Chassis. .065 minimum and .095 maximum thick with one inch diameter.
- If the front or rear bumper comes off during a race that car is finished for that race.

Muffler

- Beyea part # Xcel.
- Schoenfeld

Exhaust

- Must be stock from Xcel Chassis only.
- No jet coated headers.
- No ceramic headers.
- No stainless-steel headers.

Battery

- No gel.
- No lithium.
- Standard 5"x7" lawn mower battery.

Radius Rod

- Front | Right: 11"
- Front | Left: 10 ½"
- Rear | Right: 14 ¾"
- Rear | Left: 13 ¾"
- Front pan hard bar 18 ¼
- Back pan hard bar 21 ½
- Back pan hard bar 23 new style
- No spring rods.
- No bump rubber rods.
- Left side back pan hard bar 25"

Front Axle

- Must have an Xcel Chassis plate on the axle.
- One piece steel axle.
- See Front Axle diagram in addendum section of this document

Wheel Width

- 63" Maximum.
- See Wheel Width Diagram in addendum section of this document

<u>Fuel</u>

- Fuel must be the same ambient temp as outside temp.
- Pump gas only 93 octane maximum.
- Must be 10% ethanol.
- No Methanol.
- No additives.

Fuel Pump

- Fuel pressure 43 to 51 for Honda, Suzuki and Yamaha.
- Mallory #4060FI
- Holly red.
- Walbro (Must have Xcel stamp)
- Blue high pressure fuel line only.
- Regulator Holley 12-882.
- Regulator Xcel.
- Fitting for fuel rail russell #640863
- See Fuel System Diagram in addendum section of this document

Shocks

- Stock shock.
- Bilstein Xcel #1 or Penske Xcel #2 shocks are permitted.
- Only one manufacturer of shock all corners of the car. No mixing between Bilstein and Penske shocks.
- No cutting shocks apart or changing valves.
- No spring shims or spacers.
- Shock extension is 1 inch only back only. 4 inch threaded tube coil kit.
- Only 4 shocks per car.
- No bump rubbers.
- No drilled and/or letting gas out of the shocks.

Springs

- Open.
- Only one spring per shock.
- Only 4 springs per car.
- 1 % diameter spring only.
- No barrel springs.

Numbers & Letters

- Must reserve a car number with registration.
- Must be displayed on the roof, both sides of the car and on the back.
- Size must be 16 inches in height for top & sides.
- Letters in front, back or in number must be 8 inches minimum for top and both sides.

Body

- Must come from Xcel Chassis
- Rear deck must measure between 18 ¼ to 18 ¾ top of bumper to deck.
 - The previous deck (2017 prior version) with the larger back angle is no longer permitted
- 6 2 ½" holes LF bottom door (air for engine)
- Hole in hood for air 1 ¼" by 6 ¼" maximum.
- Optional louvers for air box 2 rows of 10 3" louvers.
- No skirting below frame in front or on both sides.
- All body parts must be on the car at the start of each race.
- Firewall must be in the car at the engine.

Qualifying

- Driver qualifies to race.
- The driver can only sign in one car.
- If something happens in the heat race, the driver can run a backup car in the B-main. Xcel designated race director must be informed of any changes at any time during the night's events.
- The last car you drive is the one the driver must race.

Point System

- Driver and car must sign in before hot laps, heat race or feature to receive 50 show up points.
- Points are awarded to drivers only.
- Top 3 driver's from heats qualify for feature and will redraw for starting position.
- Top 20 driver's from the previous year will have one provisional for the current year.
- Drivers must attempt to qualify thru heat race to be eligible to use a provisional.
- If a provisional is used, the driver will receive earned points and tow money for that night's events.

FEATURE POINTS CHART:

01-155	17-88
02-145	18-86
03-140	19-84
04-135	20-82
05-130	21-80
06-125	22-78
07-120	23-76
08-115	24-74
09-110	25-72
10-105	26-70
11-100	27-68
12-98	28-66
13-96	29-64
14-94	30-62
15-92	31 and down 50
16-90	

Rookies

- Status: if you are new to series and did not race a car bigger than an Xcel Modified, you are deemed a rookie.
- All rookies must have "Rookie" the length of the back of the car prominently displayed on the back deck.
- All rookies shall start at the tail end of the heat race for a minimum of 4 events.
- After 4 race events, representatives will determine eligibility for pill pull.

Feature Race

- Top 3 cars go to tech immediately at conclusion of race
 - Tech is at Xcel Chassis Trailer unless otherwise designated
 - At the descretion of the race official, some races may include inspections beyond 3 cars
 - Any car competing in the race is subject to a post race inspection

Air Box

- Stock from Xcel Chassis.
- Stock boots cut down.
- Air box cover must be on the car and must have a fire shield covering the engine blanket.
- No air induction system and/or ram air.
- Air filter must be:
 - Green 2004
 - K&N
 - #33/2084
 - #33/2018
 - Twin Air #Xcel chassis
 - Yamaha Air filter RC0890
 - Outer 22-8008PK
- If you run only twin air, you can run steel mesh in the air box to help hold the air filter up.

Frame

- All changes to the frame must be in letter form explaining reasons for changes. After approval, Xcel will stamp the letter and must be available for representation to Xcel Chassis officials at any time.
- Must remain stock from Xcel Chassis. No cutting bars.
- No adding bars.
- No moving of any bars to different spots.
- Engine must remain in stock position from Xcel Chassis.
- All cars must have a rock screen in front for driver safety.
- Must have a cage around the fuel tank.

2011 or Newer Cars & Cars with 2011 Updates

- Battery is in the back of car.
- Updates can be done by Xcel Chassis only.
- Aluminum engine plates must be from Xcel Chassis.

Sponsor Sticker Locations

- All sponsor stickers must be in "A" or "B" area, right and left side of doors, at the start of the season, to receive all awards.
- See diagram #5 in addendum section at end of this document

Starts & Restarts

- Restarts will be double file.
- On restarts, the leader has a choice of inside or outside lane.
- The leader starts the race and must start within the two cones.
- There are two cones, drivers cannot pass until drivers reach the second cone.
- Single file restarts:
 When the leader hits the cone, the track is green, you can only pass on the outside until the flagger stand.
- See Start Zone Diagram in addendum section of this document

Car Inspections

- All cars must be inspected by Xcel Chassis before the car is permitted to race.
- Cars must be presended for inspection by and Xcel Chassis designated official prior to first race of season or upon change of ownership.
- Inspection is not subject to a timeline. If car is first brought out after the season starts, inspection before racing is still required.
- A car that is not inspected will be disqualified until car inspection is done by Xcel Chassis.

Registration

- Car must be registered.
- Driver must be registered.

Pit & Track Behavior

- An owner is responsible for the conduct of the crew and driver at the track.
- All owners, drivers, crew, and team members must act like ladies and gentlemen at all race events.
- Any individual and/or individuals who may get into a fight or unseemly argument at the track shall immediately be suspended from the days or nights events.
 - Xcel Chassis officials may impose a monetary fine and/or a 2 to 4 race suspension for each individual.
- Any and all actions, including on the internet, by an individual and/or individuals ruled detrimental to the following:
 - Series officials, drivers and owners will receive a \$75.00 fine or higher, along with possible suspensions and/or a lifetime ban.
 - Only owners & drivers may approach an official at any time, in the trailer to discuss race events and procedures.

Illegal Components

- Parts that are found that do not comply with Xcel Chassis rules or create an unfair advantage are illegal
- Any seals that are tampered with are considered an illegal component that includes the motor.
 - ECU is subject to software validation. Failing that validation for any reason means that part is illegal.
- Illegal parts are subject to immediate confiscation by the designated Xcel Chassis official and must be forfeited with no compensation. This specifically includes the motor, frame alterations, electronics, and items such as shocks, wheels and fuel components.
- Team are subject to additional punishment including but not limited to:
 - Suspension from race(s)
 - Disqualification from race(s)
 - Monetary penalties

Loss of points and or race winnings

Three Strike Rule

Severe infractions* are subject to expulsion of the car and owner from all Xcel series sanctioned races on a permanent basis. This determination is at the sole discretion of the Xcel Series Official.

A three strike rule is in effect. If you have three quantifiable offenses unless an Xcel Official specifically prevents it you are automatically expelled from the series.

*Infractions are not restricted to illegal race disqualification.

- Attempting to duplicate or fabricate parts for an Xcel Modified without prior consent
- Repeated citations for the same infraction
- Intentionally tampering with any seals
- Attempts to navigate outside of the rules (for instance a recent technology that gives you an advantage, but there is not a rule against) is also considered an infraction.
 - To implement a recent technology that is not widely adapted you
 must discuss it with an Xcel official prior to use. Likely, if you are the
 only car with an advantage by using it you are outside of the legal
 intent
- Actions taken outside of the race environment including defamation of the series or its officials.

Protest Policy

- Any owner/driver may file a protest of another owner/driver for any infraction of the rules within 20 minutes of race finish.
- You cannot protest a finish or a rule infarction decision by an Xcel or track official.
- Protest must be in writing, specifying protest, and given to Doug.
- \$150.00 must accompany a written request.
- \$50.00 of protest money will be distributed to point fund regardless of any outcome.
- If found illegal:
 - Protestor receives the remaining \$100.00 back and the protested car receives no points or money for that night's racing.
 - Owner of the protested car may receive monetary fines and/or suspensions.
- If found legal:
 - Only the protested car receives the remaining \$100.00.
- Only the owners and drivers may approach an official at any time, in the trailer to discuss race events and procedures.

Miscellaneous

- Raceceivers radios are mandatory and must be working during race events
- Head and neck restraints are mandatory
 - O Must be SFI rated minimum of 38.1
- Any and all suspensions include weekly tracks on race days. If a race is cancelled or track not open, this is not included.
- Driver cannot have any electrical devices (EX. cell phone, credit card with chip) on person or car during any race events, raceceivers are allowed.
- Transponders are mandatory.
- Only 1 in-car camera allowed
 - Cannot face suspension.
- No magnesium.
- No titanium.
- No traction control.
- No air shifter.
- No data acquisition systems.
- No cockpit adjustable devices.
- No carbon fiber.
- No drilling or hallowing of any bolts at any time.
- No radio communications in cars.
- Total of 3 air ducts 1 must be for brakes. No aluminum bolts.
- Rental car or any outside driver that is not a regular driver with the Xcel Modified series will start in the back of the heat race and will start no better than 10th position in that nights feature.
- Only owners and drivers may approach an official at any time, in the trailer to discuss race events and procedures.

On-Track Miscellaneous

- During a race, if you pull into the pits or are sent outside by an official (Xcel or track), you cannot re-enter the track.
- 3 spin rule if you spin out with help 2 times, on the 3rd time you will be sent to the pits.
- 2 spin rule if you spin by yourself 1 time, you are sent to the pits on the 2nd time.
- If you spin someone out in the first 3 laps, you will not be able to pull a pill at the next race you attend.
- If you spin someone out, you will be sent to the rear along with the driver you spun out.
- If the driver you spun out cannot continue the night's events, you will not participate either.
- If a car flips or lands on its side, the car is finished for that race.
- If you have a flat tire on any corner of the car during a race, you will be sent to the pits.
- Drivers who are driving with malice will be penalized by the race director including possible suspension or fines. Any intentional wrecking or revenge driving will be dealt with harshly.
- If you unbolt and get out of the car on the track you are finished for that race

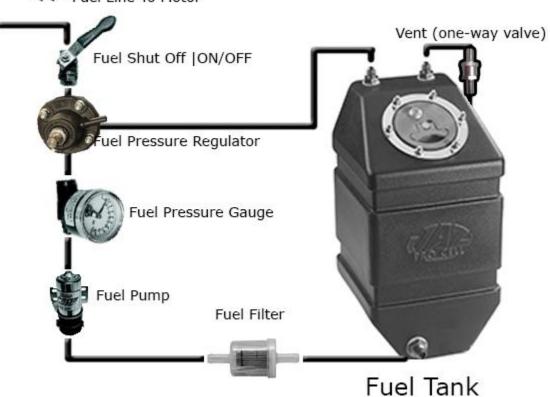
Addendum Section | Diagrams

Sponsor Stickers Diagram



Fuel Diagram

<< - Fuel Line To Motor



Start Zone Diagram

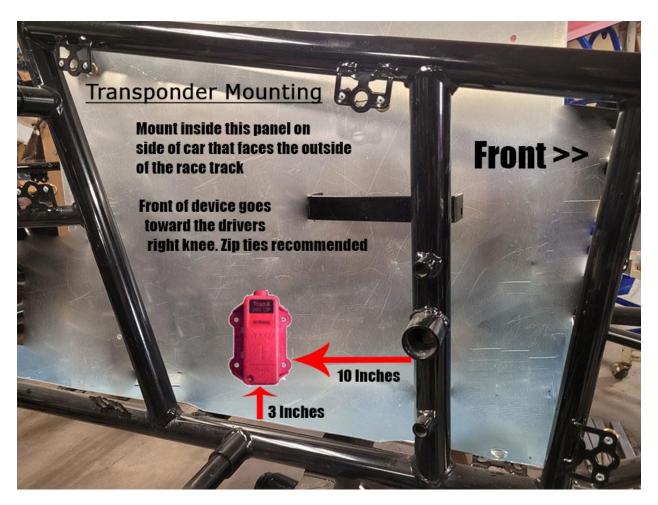


Wheel Width Diagram

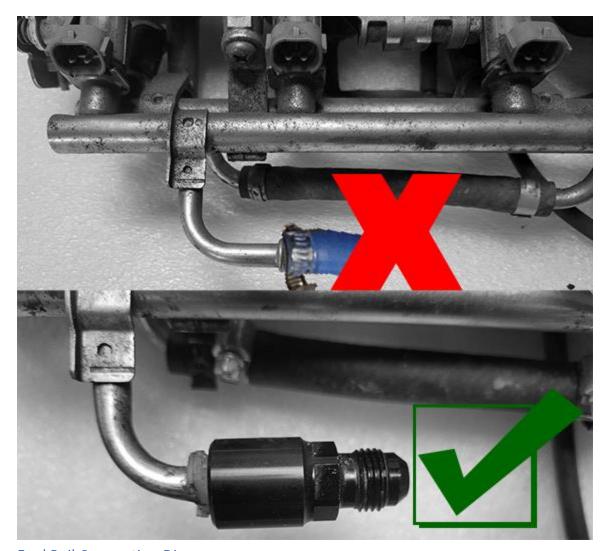


Front Axle Diagram





Transponder Mounting Location Diagram



Fuel Rail Connection Diagram

This page intentionally left blank for notes This is the end of the rules book		