

D15 TA2, GT2, August **FE FA**

Gar Robinson 74 Ranch Camaro

2015

In 2010 Howe introduced a new class of road race cars starting with the Scandinavian based Camaro Cup. The cars were soon after adapted to the North American market. In the time since the Howe design has been refined and proven with over 160 produced between the European and North American market. The 2015 U.S. car is over 100 lbs lighter than previous models with 1% more right side weight.

Howe has benefited from the input of an all star list of drivers including Pete Halsmer, Cameron Lawrence, Adam Andretti, Tommy Archer, Nic Jonsson, Tommy Kendall, Wally Dallenbach and Jan Magnussen. The most prominent growth has been in the Trans Am TA2 class but the popularity also continues to grow in GT2 and in regional events The cars are produced in one of three different categories; Pro, Club

or Custom. PRO

All but three TA2 races since 2011 and every championship has been won in a Howe built car. To keep you up front our Pro package is determined by performance driven innovations and by rule changes. Howe devotes a great deal of time to testing and Howe representatives are on hand to support the majority of the Trans Am Tour events.

The Club car is a cost effective variant of the Pro car. It has the same chassis and suspension geometry. Innovations that are driven only by rules are not included on a standard club car. As a result the cost of a Club package car has seen little change since the creation of the class. Any Pro options can be added to any club car order.



Both the Pro and Club version share a common chassis and choice of three bodies. Each car is built with a balance of weight, performance and driver protection.



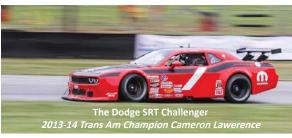
The Pro package includes an Aim MXL2 Digital data systems with engine functions, fuel level and GPS. Additional inputs may be added.



Penske 8300 series double adjustable shock are standard in the Pro package.

Key Features

Body - All three brands of American muscle cars are represented with a choice of Camaro, Mustang and Challenger look bodies. The bodies are all fiberglass with a poly propylene nose available on the Camaro. Each model has a common 104" wheelbase and 64" center of tread width. Engines and bodies will interchange on the same chassis.



Shocks – Any ½" bearing mount coilover type racing shock of the correct length will fit. Penske shocks are standard on each package. Other brands including Ohlins and JRI are available on request.



The Club package comes standard with Analog instruments. Oil pressure and temp, water temp, fuel pressure, fuel level and trans temp.



7500 Series Penske shocks are standard in the Club package.

PRO



The Standard Pro package includes Stop Tech or the new Wilwood GN6 calipers with AP rotors and Pagid or Wilwood Pads. All four rotors are floated, hat style mounts.



High volume SRS Brake Fans.



The Pro package includes a Gleason differential, bolt on axle snouts and cambered drive plates. Allows changes in rear camber. Aluminum rear hubs provide an 8lb weight savings.



Katech LS3, EFI dry sump engine pictured. Engines from Wegner, Ilmor, and Schwanke are also approved.



Pro Quartermaster 7-1/4" V-drive clutch.



A Watts Link is included in the Pro package price.

<u>Brakes</u> – The standard master cylinders are Howe G3's with remote fluid reservoirs. Caliper options are available from **Wilwood and Stop Tech**. Front brake rotors by rule are 12.19" with a floated hat type mount. The rear rotors are 11.75" in either solid or floated mount.

<u>Rear Axle</u> – Both packages use a reliable **Tiger quick change** rear end equipped with an integral mechanical cooling pump with



an external cooler. The Tiger rear end is assembled with high strength ARP ring bolts to improve durability for heavy down shifting.

<u>Steering</u> – The rugged <u>Woodward</u> rack and pinion and servo allow the steering quickness and feel to be tailored to your preference. A <u>Driven</u> steering wheel is standard.

<u>Cooling</u> – The <u>Howe</u> aluminum radiator includes a surge tank to improve efficiency. There are independent coolers for engine oil, steering and transmission.

<u>Engine</u> – The chassis will accept most V-8 racing engines. The Pro package is equipped with a TA2 approved Katech LS3. Other approved engines may be substituted at comparable costs. With the TA2 legal restrictor, engines are limited to about 475hp with a 6800 rpm limit. The Club package includes a GM



A 10 quart Howe oil tank

includes a sight glass for

checking oil level at a glance

Racing Camaro Cup LS3 which produces up to 525 hp unrestricted with a 6400 rpm limit. Custom cars can be built with engines up 700 hp.

Exhaust – The exhaust system includes Howe ceramic coated headers and an optional muffler to keep the sound below 100 db at 100 feet. The

underside of the aluminum interior is protected with high temperature Poron insulation from the driver forward. Stainless steel is available as a Pro Select option

Rear Suspension - The rear suspension

is the three-link type with an adjustable panhard bar or an optional watts linkage.

<u>Fire System</u> – The Pro car comes standard with two independent five pound fire systems mounted on the right side. This gives the driver the

CLUB



The lowest cost brake choice is the Wilwood SL6 with AP J Hook rotors and Hawk Pads. The rear rotors are solid mounted.



4-1/2" to 3" Brake duct adapter - no fan.



The Club package has a durable Detroit Locker differential with straight drive plates and axle snouts. Durable steel hub are used on all 4 corners.



The GM Racing Camaro Cup LS engine is an excellent value for a dry sump race engine.



C6 Corvette clutch for Camaro Cup LS3 or Center force clutch CT350 Crate engine.



A Panhard bar is a popular choce on all cars.



The Pro package includes two redundant Five pound fire systems.



Hinges are eliminated on the hood and trunk of Pro cars to save 8.2lbs. The wing is mounted solid. Requires remote fuel fill.



Pro pakage cars are equipped with our 2015 Improved design lower control arms. They provide added shock travel and eliminate cantilevered loads from the sway bar.

STANDARD EQUIPMENT

option of activating one system under the car and a separate system in the cockpit if needed. The in cockpit system is installed with a manual or automatic heat activated trigger.



A Howe muffler is standard in the Club package and availible on any car. A muffler is optional for TA2. Most other tracks and events have sound limits.



The fuel filler can be located inside the trunk with hinges or in the quarter panel with a solid mount wing.

Pro cars are equipped with a required right side driver restraint.

Included on both Pro and Club package cars







The original hood and trunk hinges are continued on Club package cars for convenience.



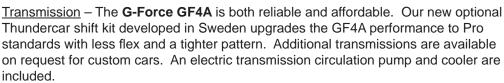
Club package cars are equipped with our original design low cost lower control arms.



Each car is fitted with a 24 Gallon Fuel Cell with a high tensile strength flexible bladder. Includes a fuel level sender, surge tank and fuel pump

Opening left door. Required on Camaro and

Challenger, optional on Mustang.





New for 2015. The Thunder car shift kit.





LED brake lights and SCCA legal tow loops front and rear. The Trans Am 2 spec wing is now carbon fiber for 2015.



G Force GF4A, T101 based transmission.



Windshield Defogger is standard while the wiper has been made optional since many customer choose to not race wet or to just use Rainex .



Hoosier bias ply tires and 15" x 10", 5x5 steel <u>Basset</u> wheels are standard. Chrome or Aluminum are optional. Lager wheels and tires are available on custom car orders.



Switches for the engine and brake fans, trans pump, defogger, tail lights, fresh air system and wipers.



PACKAGE CARS

Cars can be purchased complete or in kit form or any stage in between. For easy pricing you may choose a Pro package or a Club package, with or without assembly or drivetrain. You choose body and engine, and add any select options.

CUSTOM CARS

You can custom order your car with a mix of components from either package or add and subtract any portion of the car. We build to any stage of completion. Call to price a custom car order. Prices are quoted as an accumulation of all of their parts.

TERMS

Standard production cars are seasonally in stock and custom cars are built to order. Completion times on custom cars are seasonal and typically range from 6-12 weeks. Car orders require a minimum deposit of 50% prior to production with the balance due on completion. All prices are F.O.B. our plant.

SPARES

Spare and replacement part are kept in stock and are supported at many of the Trans Am events.

PRO PACKAGE		
LESS DRIVELINE		
Unassembled Kit, Less Driveline	\$50,800.00	
Complete Less Driveline	\$57,273.00	
COMPLETE WITH DRIVE	LINE	
Katech Chevy or Ilmor Ford	\$97,000.00	
CLUB PACKAGE*		
LESS DRIVELINE		
Unassembled Kit, Less Driveline	\$41,415.00	
Complete Less Driveline	\$48,100.00	
COMPLETE WITH DRIVI	ELINE	
525 hp Camaro Cup LS3	\$76,000.00	
TRACK DAY 350 PA	CKAGE*	
CLUB PACKAGE WITH 350 CRATI	E AND FORD 9"	
350 hp GM crate engine and Accusump	\$68,000.00	
*Club and Track Day engines are not approve		
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There are currently more than 80 Howe In Central America the same Road race cars competing in Scandinavia as the V8 Thunder car and Danish Thundercar classes.

chassis is used in CTCC with different engine and a variety of body choices.



3195 Lyle Road Beaverton, Michigan 48612 (989) 435-7080 fax: (888) 484-3946 www.howeracing.com





Chrome or Aluminum Wheels in place Steel Basset	+\$200.00
Race Tech Seat Installed	\$1,665.00
Richardson Custom Fit Speedway Seat Installed	\$2,400.00
5 or 6 point Harness Installed	+\$400.00
Fresh Air System with Helmet Air and Vest Circulator Installed	\$1,278.00
Windshield Wiper	+\$529.00
Exterior Body Paint - Single Tone	+\$2,800.00
Stainless Steel Exhaust	+\$1,700.00
Dzus Fastened Front and Rear Window	+\$700.00
Pro Brake Pedal	+\$209.00
Mid Valley Transmission	\$+4,000.00

Prices are for the USA version only. European and Central American classes require different options as standard. Specifications vary according to regulations.

In Northern Europe contact Performance Automotive Scandinavian, AB Tony Bryntesson - Owner Emáil: t.bryntesson@bryntessonmotorsport.com Tel: 070 555 33 08

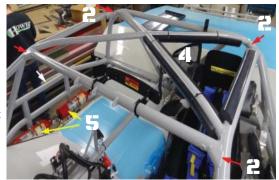
In Central America, Columbia, Ecuador and The Dominican **Republic contact :** Bliss Entretenimiento, S.A. Pablo Otero S. - Gerente de Operaciones Email: pablo@bliss.cr Tel: +506 8705-6963

HOWE CARS HAVE WHAT OTHERS DON'T:



When making comparisons between Howe and other
TA2/GT2 builders consider these features.
Howe has performed destructive testing with GM
Racing and coauthored an SAE paper on force deflection.
This experience is incorporated throughout the chassis design and construction.

Saddle gussets are used in critical locations throughout the chassis. The FIA configured roll cage has continuous 1-3/4" x.095 d.o.m. tubing from the main roll bar to the frame rail, not a stock car type halo and a post design. Howe chassis are built by Howe, not sub contracted.



The Howe roll cage is made with a closer fit to the body providing large openings for entry and escape and increased leg protection. The top left door bar is lowered and a shoulder protection bar is added for strength.

3 The right side of the cage has three 1-3/4" x .095 door bars for added protection and right side weight. Fire bottles are securely mounted to the extreme right. The battery is protected inside of the right frame rail.

4 The Howe roll cage is built with an FIA style X member that provides greater stiffness. The convex bar design of the roof bars increase helmet clearance and provide self righting characteristic. The front of the roll cage is reinforced up to FIA specifications.

5 Two five pound fire systems are standard in Pro cars. The driver triggered system provides suppression in the engine bay and fuel cell area. The second system covers the cockpit by both a manual trigger for safety workers and an automatic thermal activation trigger located near the driver's seat.







G The Howe windshield wiper uses a motor that will not stall at high speeds. The wiper motor is located to the right with a rocker linkage to keep it away from exhaust heat. The defroster is effective with a fan and heated duct under the dash. Every complete Howe car leaves with a layer of protective window film standard. This saves the expensive mar resistant poly carbonate from pits and wiper scratches.

? <u>No holes are drilled into the chassis tubes.</u> Flanges are welded to the chassis to attach the interior sheet metal.

All wires and lines are attached externally.
 Other chassis builder drill dozens of holes into critical bars.
 The holes greatly weaken the chassis and can cause the accumulation of water and corrosion.

9 Sturdy integral tie down lugs front and rear save time and add security in transport.

10 Interiors are insulated to lower the cockpit temperatures.

11 In addition there are also heat shields on the oil tank, starter, ECU harness and battery.

L2 Each Howe chassis comes with a comprehensive owner's manual. The 2015 manual is 58 pages of instructions, schematics and specs. The book covers set-up and handling adjustment as well as maintenance procedures, torque specs, recommend spare parts, required tools and gear/speed charts.











