

THIS IS YOUR CONDITIONAL WARRANTY AND ENGINE BREAK-IN INSTRUCTIONS PACKET

TO REGISTER YOUR WARRANTY:

THE ATTACHED WARRANTY CONTRACT MUST BE SIGNED BY THE CLIENT (OR ACTING AGENT, SUCH AS A SHOP WHICH RECEIVED DELIVERY) AND RETURNED TO PHOENIX ENGINE WITHIN 10 DAYS, OR THE WARRANTY BECOMES INVALID. (UNDER EXTENUATING CIRCUMSTANCES THIS TIME LIMIT MAY BE EXTENDED UP TO A MONTH, AT THE DISCRETION OF PHOENIX ENGINE.)

IT IS THE RESPONSIBILITY OF THE CLIENT AND/OR ACTING AGENT TO RETURN THE SIGNED WARRANTY CONTRACT WITHIN THE TIME LIMIT, OR YOU HAVE NO WARRANTY.

REMEMBER: THE USE OF SYNTHETIC OIL IN YOUR ENGINE VOIDS YOUR WARRANTY! NO EXCEPTIONS.

PHOENIX ENGINE 21632 North 7th Avenue, #1 Phoenix, AZ 85027 (602) 866-8044

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Page 1

ENGINE #	
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21632 North 7th Ave > Suite 1 • Phoenix, Arizona 85027 (602) 866-8044 **DATE:**

CONDITIONAL WARRANTY & ENGINE BREAK-IN INSTRUCTIONS

The following Conditional Warranty is based upon strict compliance with the proper operation and break-in of your new engine. Failure to follow the instructions as set forth below will void your warranty and cause unnecessary and unneeded damage to your new engine. Please read the warranty and instructions thoroughly on receipt of your new engine and sign where indicated below. The warranty covers defective workmanship and or materials furnished by Phoenix Engine. This warranty is NOT an unconditional guarantee against all hazards or failures, such as accidents, floods, storms, etc. beyond our control.

Conditional Warranty Contract

Phoenix Engine Extended Warranty Program is 12 months or 12,000 miles. Warranty requires oil changes to be performed at 500 miles, 1,000 miles, no more than 1,500 miles. See Quick Oil Change page 2. (Green sheet) Warranty requires proof of oil changes at stated intervals to be submitted or keep on file for Phoenix Engine as outlined in paragraph 2 A below.

Engine Break-In Instructions

- 1. Your Warranty is conditional upon proper break-in of the engine. In order to assist in the proper maintenance and break-in of the engine, as your warranty states, the vehicle may be operated at minimal speed and under normal conditions. It is best not to exceed 65 M.P.H. during the first 500 miles. Excessive racing of the engine or additional stress during this time may result in damage to the bearings, rods, camshaft and other major parts. Take off slow and avoid passing other vehicles quickly. Drive carefully.
- 2. Engine must be warmed up for a minimum of THREE minutes each morning. Failure to do so will not let the engine break in properly. Please check for any oil or water leaks during the first 500 miles: as the engine seats itself in, so will the various gaskets and seals. Under NO circumstances should you operate the vehicle with the oil level less than full. You must keep your warranty packet and a copy of your Engine number available. You must keep legible photocopies of oil, filter and zinc additives receipts and all documentation of odometer readings at each oil change on file with your records NO EXCEPTIONS.

It will void your warranty if there are no proof of receipts and odometer readings.

3. Do not operate the vehicle under any circumstances without an air filter. Excessive dusty conditions without the air filter will cause excessive damage during the run-in period of your engine. If you encounter any problems such as overheating or engine noise you should stop the engine immediately. Vehicle must be towed not driven.

Page 1a

- 4. Any repairs or work performed by persons other than P.E.R shall VOID the Warranty. We cannot warrant repairs or workmanship for other persons having engaged in activities which may be detrimental to the Engine itself, noting that the Engine is marked and Sealed. Advanced authorization must be given for any work to be performed on this engine.
- 5. This Warranty is limited to faulty workmanship or defective parts furnished by us; is NOT an unconditional guarantee against all hazards or failure beyond our control. Also understand that in areas of excessive heat such as Arizona sometimes engines will seep a little during break in. (Note: from GM, Ford, etc.)
- 6. In general, any unusual noises or leakages from the engine during the break-in period should be reported immediately. We would appreciate your calling soon as possible. Without injury to the vehicle, the vehicle should be returned to home or shop for immediate attention. This means it may have to be towed at your expense. By following the general rules the Warranty will remain in effect for the period as set forth by signing below.

Carry In, Carry Out and Crate Engines Only:

1. If you choose to install your custom built Long Block, Complete Crate or Turn Key Engine:
Then you must do the Quick Oil Change described on page 2(green sheet) Change your oil at 500 miles, making sure zinc and additives as so described. Now you will need to change oil at 1,000 miles and no more 1,500 miles. MUST use a 10-40 for cool weather and 20-50 for Hot weather weight oil for proper break-in. NO 10-30 OR SYNTHETIC OILS ARE ALLOWED during the break-in and your warranty period. Proper Oil Changes must be done to keep this warranty valid.
"You must keep on file or mail to us: ODOMETER READINGS AND LEGIBLE COPIES
OF YOUR RECEIPTS. PROOF THAT THE OIL HAS BEEN CHANGED ON TIME WITH

THE PROPER WEIGHT OIL. Odometer readings must include reading at time of engine install, and reading at each oil change. NO EXCEPTIONS!! Use of graphite or synthetic oils will VOID this Warranty. Lack of proof of (legible photocopy of receipts) at the proper intervals will void this Warranty.

2. If you install your own Engine and you have an. Engine problem that requires the Engine to be removed, you, the customer are responsible to pull the Engine yourself or have it removed by other acting agents, shop or facilities at your cost. This includes Long-Blocks, Heads and all Engine or bolt-on Accessories.

On a labor claim by a shop only, based on flat rate time, only 50% of shop average national rate will be allowed Do not confuse this with retail labor. Maximum adjustment on labor will be made by Phoenix Engine. See labor claim limitations on page 4 (yellow sheet)

Phoenix Engine hereby verifies delivery of this this limited Warranty and Instruction Sheets on this day:	I, purchaser below signed, do hereby acknowledge of receipt limited Warranty and Instruction Sheets on this day:
Phoenix Engine:	Customer:
Representative:	Mechanic:

Loc: GoogleDrive/Page1Warranty 3-3-16mr,6-28-16mr, 1-25-19cc

THIS PAGE (2) IS FOR HIGH PERFORMANCE RACING ENGINES ONLY, WHICH HAVE NO WARRANTY.

PHOENIX ENGINE

PAGE 2

Fast Track Done

Quick Oil Change- Part of the Warranty Concerning Oil Changes

We want you to change the oil and oil filters again after the engine has been broken in. Please note: Engine has no additives no oils, no zinc. We are not allowed to ship ANY FLUIDS in the engine. Engines ONLY contain assembly lube.

Follow these steps for your 1st start up:

 You must use <u>JOE GIBBS DRIVEN</u> first 500 miles after the 500 miles then you can use <u>Valvoline VR 1 with Zinc or Castrol Oil with Zinc or Comp Cam Break-in oil</u>

2. NOTE* THE OIL YOU USE MUST HAVE THE RIGHT AMOUNT OF ZINC

- 3. After the 500 miles you can buy the ZDDP Zinc to add to your oil BUT DO NOT ADD THE ZINC IF THE OIL YOU BUY ALREADY HAS ZINC! THIS WILL CAUSE AN OVERDOSE OF ZINC AND IT WILL CAUSE CAM FAILURE.
- 4. **NOTE: MUST USE CONVENTIONAL OIL NO SYNTHETICS OR BLENDS

5. You have read how to prime your engine properly.

6. Start the engine and run it for 25 to 30 minutes. NO EXCEPTIONS

7. Let the engine cool down for one hour.

- 8. Start your engine again and reset your timing, Jet carburetor, etc. As needed per break in instructions.
- At this time you will also need to re-torque the heads, 70 lbs for iron heads 60 lbs for aluminum heads. Even with perma-torque head gaskets. It is recommended to check the torque. NOTE* PLEASE LOOK UP YOUR TORQUE SPECS FOR YOUR ENGINE.

This is referred to as our **Quick Oil Change**, and is to be performed after the initial startup and break in procedures. After doing an oil analysis we concluded that this Quick Oil Change process has to be done.

Please remember that you will have already done your 1st oil change with the initial startup and break-in this will be your second immediate oil change.

When you get to your 500 mile oil change we want you to, of course, change the oil and filter again along with adding more of the Valvoline VR-1 which has the Zinc. We have proven that with extreme heat and the performance applications of an engine such as yours that the requires Zinc additive in the oil for the rest of the life of the engine.

Month	Day Year	Month	Day	Year
		 •		

**** NO SYNTHETIC OIL!! NO BLENDS!!****

RECOMMENDED BREAK-IN PROCEDURES FOR CRATE ENGINES

PROTECT THE INVESTMENT YOU HAVE IN YOUR ENGINE!

TAKE THE TIME TO READ AND FOLLOW THESE
RECOMMENDATIONS OR ANY WARRANTY WILL BE VOIDED.

BEFORE STARTING THE ENGINE FOR THE FIRST TIME:

Before starting engine for the <u>first time</u>, be sure it is pressure lubricated, which means to prime the oil pump, THEN YOU MUST turn the engine over with the starter but without spark plugs so there is <u>NO LOAD</u> on the new engine bearings until you get oil pressure. You must also install the Distributor to have oil pressure because this will oil the hydraulic lifters to set preload and oil the entire lower end and top end so that when you start the engine normally there will be no dry areas. RUN Starter 5 to 10 Seconds, if needed. Oil pressure will come up, **Do this 1 to 2 times ONLY**.

Reason: We do not want to wipe off the cam lube off the cam, this will cause cam failure.

A. Any vehicle with electric fuel pump, injectors, or direct injection: - the electric relays and/or fuses MUST BE DISCONNECTED so that as you are priming the engine you will not flood the engine with fuel. Flooding will cause severe damage to the cylinders because gas will wash out the oil and break-in lubricant that we had put in the cylinders to protect it during startup. These relays/fuses must be disconnected, no exceptions. If you have any questions, CALL US.

- When you start your engine, the engine must run at a fast idle. Minimum is 1800 rpm, maximum is 2000 rpm. Check oil level before starting, and coolant level before starting. We highly recommend that there be a minimum of two people involved when starting a new engine. That way someone is sitting in the driver's seat to watch oil pressure and water temperature. The engine must be run for 30 minutes, even though the coolant may rise to operating temperature. If during the break-in period the coolant overflows or "boils over" stop the engine and allow the engine to cool down for 45 minutes. NO EXCEPTIONS! Then you may add more coolant and water and restart and finish the break-in process.
- 3. If break-in procedure for 30 minutes is successful the next is to shut the engine down and let it sit for one hour. This allows all the new engine parts to cool down and break-in properly. NO EXCEPTIONS.
- 4. Re-start engine. Adjust carburetor and ignition timing. You MUST jet carburetor. If your engine is throttle-body injected or direct injected, then you MUST set your base timing as prescribed in your owner's manual. If you do not have an owner's manual available, you need purchase one to know how to set base timing so that your engine will run at the proper advancement with your on-board computer.
- 5. Stop the engine and re-torque the manifold. Necessary, re-torque the heads to engine manufacturer's specifications in proper sequence. Re-adjust hydraulic lifters if needed. NOTE: If you have a solid cam then you must re-adjust the rockers to the proper spec as prescribed in your packet.

21632 7th Ave Suite 1 SW Comer of Deer Valley Rd Phoenix, AZ 85027 (602) 866-8044

RECOMMENDED BREAK-IN PROCEDURES FOR CRATE ENGINES - SIDE 2

6. (This paragraph is for Computer Engines Only) If any codes come up after your break-in process, refer to your manual or take your vehicle to a qualified mechanic to read the codes to eliminate any bad accessory parts concerning your computer driven engine that must be replaced (for example, oxygen sensors, coolant temperature sensors, etc.)

7. **START HERE IF BREAK IN WAS DONE BY US!!!**

Start engine again and make a test run on the road at 30 MPH in "drive" range or select proper gears for standard transmission. After reaching 30 MPH, open the throttle and accelerate to 50 MPH and then decelerate by removing your foot from the accelerator pedal. Repeat this procedure at least 4 or 5 times. DO NOT RACE THE ENGINE.

- 8. NOTE: Applying light loads to the engine for short periods of time causes increased ring pressure against the cylinder walls and helps to seat the rings. This is especially important because you are "Breaking-In" the engine with heavy duty oils. The rapid deceleration increases vacuum and gives extra lubrication to the pistons and ring assemblies, and also helps lubricate the whole engine.
- 9. You must use JOE GIBBS DRIVEN first 500 miles. After the 500 miles then you can use Valvoline VR 1 with Zinc or Castrol Oil with Zinc

 NOTE* THE OIL YOU USE MUST HAVE THE RIGHT AMOUNT OF ZINC

 After the 500 miles you can buy the ZDDP Zinc to add to your oil BUT DO NOT ADD THE ZINC IF THE OIL YOU BUY ALREADY HAS ZINC! THIS WILL CAUSE AN OVERDOSE OF ZINC AND IT WILL CAUSE CAM FAILURE. **NOTE: MUST USE CONVENTIONAL OIL NO SYNTHETICS OR BLENDS
- 10. After 500 miles of service, the oil must be changed. The intake manifold, hose clamps, heater hoses, and the whole cooling system need to be checked for leaks. If you have a high performance application then you must re-torque cylinder heads to proper specifications. If your engine was fast-tracked by us, you do not need to re-torque the headbolts. Re-adjust the hydraulic lifters if needed, and if you have a solid performance cam, then you must re-adjust the rockers. We suggest that this be done again at the 2500 or 3000 mile mark maximum. We realize this means extra work, but it assures long and satisfactory engine performance. This is especially true on any high performance application.
- 11. Please refer to the Warranty Contract for all other questions.

Engine #:	
Customer:	Date:
Engine Installer:	Date:

- 1. Please contact us **first**, if we are the dealer from whom the Custom Crate Engine was originally purchased.
- 2. If you or any other acting agent, shop or facility installed your engine you must still contact us **first**, along with the installers. NO EXCEPTIONS.
- 3. Once the problem has been diagnosed and responsibility determined then you must contact Phoenix Engine for authorization before proceeding with any warranty work or tear down.
 - A. Communicate nature of problem, engine number, date of installation, date of delivery, mileage. Example: 65212, a five digit number assigned to your engine.
 - **B.** A claim authorization number will be assigned by us for the disassembly or repair. It is most important that this claim and engine number be included in all future correspondence.
 - C. If it is determined the failure was caused by defective workmanship or material furnished by us, we'll make a labor allowance of thirty dollars per hour, (\$50.00) based on the national motors flat rate time guide. (do not confused this with retail shop labor)
 - Maximum adjustments for any labor vary from one hundred and fifty dollars (\$150.00) for minor repairs. If you install the engine yourself there is no labor paid for remove and replace.
 - **D**. Main reason for set labor payout guidelines is to avoid abuse that individual technicians and shops regarding performance engines.
 - E. If you are doing the remove and replacing of your own carry in engine or with a friend the labor claim will be minimal.
- 4. All parts used for repair must be furnished by us, unless otherwise directed by our Customer Service Department.
- 5. After it is determined the failure was caused by defective workmanship or materials furnished by us. call customer service at (602) 866-8044.
- 6. Take reasonable steps to protect the engine or part from further use, damage or contamination.
- 7. No allowance will be made for oil, antifreeze, towing, service calls or any charges other than parts and labor as shown in this warranty 4 page package.
- 8. When submitting a repair a repair bill, the following information must be included: (third party)
- A. Dealer, shop or facility from whom the engine was purchased.
- B. Owners name, the date they purchased the engine and copy of invoice.
- C. Engine number, Claim number, serial number if needed.
- D. Copy of original itemized installation repair order from dealer or shop.
- E. After diagnosis has been determined Reason of failure in writing.
- F. Mileage when installed and mileage now.
- G. Claim must be made within 15 days after occurrence or this warranty becomes void.
- H. All parts being replaced must be kept to be returned to Phoenix Engine NO EXCEPTIONS.

Engine Number	Speedometer Reading			
Date of InstallationIn	staller's Name and Phone Number_			
Address	City	State	Zip	paga diadental and an annual an annual and an annual an annual and an annual
Customer or Agent	Da	ate		
Shop or Installer	Date_		d-discharate and a	

USE PREMIUM FUEL ONLY

PG. 5

IMPORTANT MUST READ!

VERIFICATION OF TUNE-UP: MUST READ AND SIGN

Your engine MUST run 6 to 8% richer on a new engine so there is not a lean misfire.

DO NOT take the carburetor out of the box and immediately bolt it on to your engine WITHOUT PROPER JETTING. If the carburetor is not jetted right it may create a lean problem and will hurt the engine. It will be obvious to us upon inspection and could affect your warranty.

For all engines, we strongly suggest using LUCAS 3X OCTANE BOOSTER... for these engines, <u>IT IS A MUST!</u> This can be purchased at Auto Zone, etc.

If you install your own carburetor, we will need the make, model, and part number: Example: If it's a Edelbrock – 750CFM #1411, or Holley – 750CFM #4160. We also require the date of purchase. THIS INFORMATION IS A MUST TO MAINTAIN YOUR WARRANTY.

*****MUST BE SIGNED BY THE CUSTOMER, OR IF A SHOP MUST BE SIGNED BY AN AUTHORIZED TECHNICIAN*****

Send valid copies of receipts for recommended Oil and Zinc when purchased. This means if the engine is installed 2 weeks,

1 month, or 6 months later, or whenever the Installation of the engine occurs.

Remember that you must send the warranty pack information back to us in 7-10 business days even if the engine is not installed so that we can activate your warranty.



Date/		Customer Signature
Date / /	- ALANA BARANA BARA	Shop's Signature
LOC: GoogleDrive/LUCAS 5A		Date: 8-20-15mr

Phoenix Engine 21632 N. 7th Avenue Ste1 Phoenix, AZ. 85027 602-866-8044

Installing a Toggle Kill Switch is Mandatory

- 1. Installation of a kill toggle switch is for ignition cutoff.
- 2. Engine can turn over with the ignition key to build oil pressure <u>before</u> the engine starts.
- Not installing a toggle kill switch voids your warranty and can severely damage the engine within seconds of initial startup.
 This is necessary on performance engines not on stock engines.
- 4. If you have an Oil Cooler Stand Alone or Inline Radiator Oil Cooler. Must be Replaced With and Provide Proof of Receipt.

You must keep copies: Anything regarding kill toggle switch installation, keep on file for your records. Example: Receipts of installation parts and or labor Date: Date:

Loc: Google Drive/ Masters/ Page 6 Toggle Switch 3-7-16mr 6-3-19cc

Shop or Installer

Page 7 VACUUM ADVANCE WILL BE MARKED YES or NO

H.E.I. ADJUSTABLE VACUUM ADVANCE

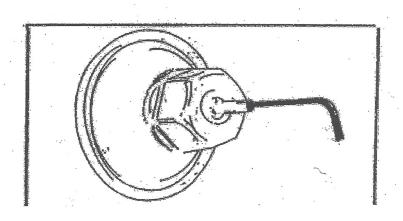
Bring engine to operating temperature before making final adjustment. Plug vacuum hose and set timing to your spec sheet lower side. (example: if 6 to 8 degrees you would use six.)

Re-connect the vacuum hose and road test. Adjust the vacuum advance in the clockwise direction until a spark knock is noticed while driving the car in highway and city conditions. We recommend that the vacuum advance be adjusted in small increments such as 2 – turns at a time.

Then back out the adjustment screw (counter-clockwise) in 1-turn increments until spark knock is eliminated.

Use an Allen wrench 3/32nds.

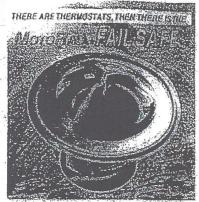
The vehicle should be driven after each change.



Page 8

RED OR ORANGE COOLANT ONLY. NO GREEN

160 WHEN HOT OUT
180 WHEN COOL OUT



LOCKS IN AN OPEN POSITION
AUTOMATICALLY LOCKS OPEN TO
PERMIT COOLANT FLOW WHEN
OVERHEATING OCCURS

Fail Safe® Thermostat

The new Fail-Safe® thermostat offers advanced automotive technology and provide motorists with real added value and additional response time in the event of system overheating. This is the product of its kind in the automotive industry, developed for safe engine shut down in the case of system overheating. The Motorad Fail-Safe® operates in two stages:

Stage !

Under normal conditions, the Motorad New Fail Safe® Thermostat will operate like any other thermostat.

Stage 2

Unlike standard thermostats, the Fail Safe® thermostat, is built with an extra stroke that automatically locks into an open position when an overheating condition occurs. This allows the coolant to continue to flow between the radiator and engine, thereby protecting the engine components from serious damage while the vehicle is safely driven to the nearest service center.

This major advancement in the automotive thermostat technology since the inception of the Fail Safe® thermostat is one that promotes a measure of preventive maintenance for the engine cooling system. Although the thermostat is not designed to prevent system failure from overheating, it can greatly improve operating reliability in emergency situations. This translates into substantial cost savings for the driver where repairs are required and considerable comfort in the knowledge that when things heat up, you won't be caught on the side of the road with major automotive repair bills.

Motorad Fail-Safe® thermostats are available at Auto Value, AutoZone, Canadian Tire, Fisher Auto Parts, O'Reilly and Part Source.



PROFESSIONAL STRENGTH FORMULA

- Seals Leaks and Seepage
- Compatible with ALL Brands of Antifreeze Including Conventional Green or Blue (Silicate-based) and Extended Life Red/Orange or Yellow (OAT/HOAT) Coolant
- Helps Control Electrolysis
- Lubricates Water Pump Seal and Inhibits Rust & Corrosion
- Harmless to ALL Plastic, Metals, Aluminum, Hoses & Connections

DIRECTIONS: Cooling systems that are dirty or partially clogged should be flushed before usage:

- 1. Remove radiator cap when engine is cool.
- 2. Install 2 tablets in radiator for each gallon of cooling system capacity. If vehicle does not have a regular radiator cap, remove top hose where it attaches to radiator and install tablets in hose and then reinstall hose. Tablets may be crumbled or pre-dissolved for easier application.
- NOTE: MOST VEHICLES WILL USE ALL SIX TABLETS.
- 3. Fill radiator and reservoir to proper level.
- 4. Reinstall radiator cap.
- 5. Drive/idle engine for 15 minutes at normal operating temperature.
- 6. If leak persists, a second application may be necessary. One package treats systems up to 3 gallons.

WARNING: Opening cooling system while engine is hot or running may cause severe burns. NOTE: For continued protection of the entire cooling system, repeat BAR'S LEAKS® application every 15,000 miles (25,000 kilometers) or once per year.

Protege al sistema de enfriamiento

- Sella fugas y goted . Compatible con TODAS las marcas de anticongelante, incluso refrigerante tradicional verde o azul (a base de silicato) y refrigerante rojo/anaranjado o amarillo (OAT/HOAT) de vida útil prolongada • Ayuda a controlar la electrólisis
- · Lubrica el sello de la bomba de agua e inhibe la oxidación y corrosión
- Inocuo para TODOS los plásticos, metales, aluminio, mangueras y conexiones

INSTRUCCIONES: Se deberá purgar los sistemas de enfriamiento que estén sucios o parcialmente obstruidos antes de útilizarlos.

- 1. Remueva la tapa del radiador cuando el motor esté frío.
- 2. Coloque 2 tabletas en el radiador por cada galón de capacidad del sistema de enfriamiento. Si el vehículo no tiene una tapa de radiador regular, quite la manguera superior donde va conectada al radiador, coloque las tabletas en la manquera y reinstálela. Las tabletas pueden desmenuzarse o disolverse previamente para facilitar la aplicación. NOTA: LA MAYORÍA DE LOS VEHÍCULOS UTILIZARÁN LAS SEIS TABLETAS.
- Llene el radiador y el depósito hasta el nivel apropiado.
- 4. Coloque la tapa del radiador.
- 5. Haga funcionar el motor (o maneje) durante 15 minutos a temperatura normal de operación.
- 6. Si persiste la fuga que sea necesaria una segunda aplicación. Un tubo sirve para tratar sistemas de hasta 3 galones.

ADVERTENCIA: La apertura de un sistema de enfriamiento cuando el motor está caliente o en funcionamiento podría ocasionar quemaduras graves.

la aplicación de BAR'S LEAKS® cada NOTA: Para la protección continua del sistema de enfriamiento completo, regita. 15.000 millas (25.000 kilómetros) o una vez por año.

KEEP OUT OF THE REACH OF CHILDREN

CAUTION: Eye irritant, flush with water. If ingested consult doctor immediately.

MANTENGA FUERA DEL **ALCANCE DE LOS NIÑO**

PRECAUCIÓN: Irritante de los ojos. Enjuagar con agua. Si fue ingerido, consultar al doctor inmediatamente.



BAR'S PRODUCTS MADE IN USA

p/n HDC

Call (800) 345-6572



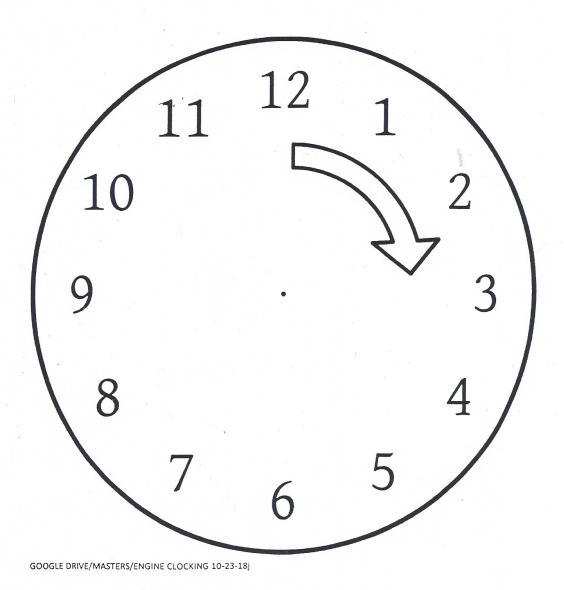
Questions or Comments? www.barsleaks.com

(9 am - 5 pm Mon-Fri EST)

If your engine is going to sit for more than 6 months it is highly recommended that you turn the engine over one quarter of a turn at a time every two to three months so that the engine is not sitting in the same position for an extended period of time.

This is known as clocking of the engine.

For example 12 to 3 is one quarter turn.



OIL TYPES



HOT ROD OILS

Zinc (ZDDP) is a critical engine oil additive, but it's only one component of what makes Driven Hot Rod Oils the preferred choice of top street rod and muscle car engine builders. Because these cars are not typically daily drivers, Driven Hot Rod Oil goes beyond ZDDP to also provide critical storage-protection additives that guard against internal corrosion and dry starts. Available in conventional and full-synthetic formulas, no other oil provides this unique combination of advanced lubricant chemistry.

JOE GIBBS OIL CAN BE ORDERED ONLINE www.summitracing.com

HRT 15W-50

/	CONVENTIONAL OIL			
	Qt. Bottle	Case (12) Qts.		
W HR1 15W-50	02106	02107		
HR5 10W-40	03806	03807		
HR2 10W-30	02006	02007		
	SYNTI	HETIC OIL		
-	Qt. Bottle	Case (12) Qts.		
HR3 15W-50	01606	01607		
HR6 10W-40	03906	03907		
HR4 10W-30	01506	01507		

BREAK-IN OILS

Driven BR Break-In Oils are the preferred choice of leading internal engine parts manufacturers. Driven's conventional Break-In Oils have low levels of detergents, which when overused can block the formation of proper anti-wear film. Each bottle of Driven Break-In Oil contains optimum levels of Zinc and Phosphorus and ensures excellent ring sealing. Driven Break-In Oils don't require any extra additives, making them perfect for the first 400 miles of your engine's life.

/ must	Qt. Bottle	Case (12) Qts.	
BR 15W-50	00106	00107	
BR40 10W-40	03706	03707	
BR30 5W-30	01806	01807	
BR20 5W-20	04346	04347	

COMPETITION/RACE OILS

Competition pushes engines to the edge, and your motor oil provides the thin film of lubricant that keeps your race engine from going over that edge. Driven Racing Oil developed a race-specific line of oils to deliver a competitive advantage without compromising durability. Formulated with more Zinc, Moly and proprietary friction modifiers than competing brands, the XP series of Driven Racing Oils delivers winning performance and protection.

		SYNTHETI	COIL
	Qt. Bottle	Case (12) Qts.	Case (2) 10 Qt. Bottles
XP6 15W-50	01006	01007	N/A
XP9 10W-40	03206	03207	N/A
XP3 10W-30	00306	00307	00315
XP1 5W-20	00006	00007	00015
XP2 0W-20	00206	00207	00215
XP10 0W-10	03306	03307	N/A
XPO OW	00406	00407	00415
	SEI	MI-SYNTHE	TIC OIL
	Qt. Bottle	Case (12) Qts.	Case (2) 10 Qt. Bottles
XP5 20W-50	00906	00907	00915
XP7 10W-40	01706	01707	N/A
	co	NVENTION	IAL OIL
	Qt. Bo	ttle C	Case (12) Qts.
XP4 15W-50	0050	06	00507
XP8 5W-30	0190)6	01907



Centrifugal Advance Kit PN 8464

Parts Supplied

- 4 Advance Bushings
- 6 Advance Springs

Advance Springs: The rate, or how quick the advance comes in is determined by the type of springs which are installed on the distributor. To change the springs, use needlenose pliers. Be sure that the new spring seats in the groove on the pin.

SPRING COMBINATION 2- Heavy Silver	RATE OF ADVANCE SLOWEST	FIGURE 4 (Page 2) A
1- Heavy Silver 1- Light Blue		В
1-Heavy Silver		С
1-Light Silver 2- Light Blue		D
1- Light Silver 1- Light Blue	-	E
2- Light Silver	FASTEST	F

Figure 1 Advance Stop Bushing Chart.

Stop Bushings: The Stop Bushings are responsible for limiting the amount of advance. The chart shows the amount of advance that will occur with each bushing. To change the bushing, remove the lock nut and washer on the bottom of the advance assembly.

BUSHING SIZE	APPROXIMATE CRANKSHAF DEGREES
Red-Smallest	28
Silver	25
Blue	21
Black-Largest	18

Figure 2 Advance Stop Bushing Chart.

Note: Some applications may require removing the distributor gear and shaft.