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Book Descriptions:

Crane Hi 4 Ignition Manual

Single fire operation increases engine power at high RPM, improves starting, and reduces the likelihood of backfiring at low RPM. WARNING 1996 and later models have a vehicle tilt sensor that shuts off the ignition if the motorcycle rolls on its side. This feature is disabled when the HI4 ignition is installed. The HI4 features stateoftheart RISC microcontroller technology that allows an adjustable advance and rev limit. A timing LED indicates static timing top dead center and gives diagnostic information. Two starting modes are provided electric start and kick start. A tach output insures accurate tach readings even at the rev limit. COIL AND SPARK PLUG CABLE CONSIDERATIONS We recommend replacing the OE coil. Coils used with the HI4 must have at least 2 ohms primary resistance. Coils with 4 ohms or higher may be used, but may not produce optimum output. We recommend the following coils for single and dualplug applications INSTALLATION INSTRUCTIONS for HI4 SINGLE FIRE MOTORCYCLE IGNITION Part Number 82200 1 HI4 Ignition With Single Plug Heads. Use Crane 83001 coil. You will have to fabricate a bracket to mount the second coil. HI4 Ignition With Dual Plug Heads. Use two Crane 83006 coils. Crane FireWire spiral core wires are recommended for maximum performance. REMOVAL OF OE ELECTRONIC IGNITION SYSTEM 1. Turn ignition switch off and disconnect battery ground cable. 2. Refer to Figure 1. Remove OE ignition module and wire harness items 14. You will disconnect two wires at the coil, wire going to the VOES Vacuum Operated Electrical Switch, ground wire at the module, and the 3 pin plug 20 that connects to the sensor plate. Refer to shop manual for locations. 3. Remove ignition cover plates and gasket items 5 9. This will require drilling out two rivets. The rivets will later be replaced with two supplied selfthreading screws. 4. In order to remove the sensor plate cable, the cable plug 20 must be removed

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• crane hi 4 ignition manual, crane hi 4 ignition manual, crane hi 4 ignition manual pdf, crane hi 4 ignition manual download, crane hi 4 ignition manual diagram, crane hi 4 ignition manual instructions.

Use needle nose pliers to pull the terminals out of the plug. Thank you, for helping us keep this platform clean. The editors will have a look at it as soon as possible. Single fire operation increases enginepower at high RPM, improves starting, and reduces thelikelihood of backfiring at low RPM.WARNING 1996 and later modelshave a vehicle tilt sensor that shuts offthe ignition if the motorcycle rolls onits side. This feature is disabled when he HI 4 ignition is installed. The HI 4 features stateoftheart RISC microcontrollertechnology that allows adjustable advance and revlimit. A timing LED indicates static timing top dead centerand gives diagnostic information. Two starting modes are provided electric start and kick start. This part is not included with the HI 4installation kit and can be purchased from your local dealer.COIL AND SPARK PLUGCABLE CONSIDERATIONSWe recommend replacing the OE coil. Coils used with the HI 4 must have at least 2 ohms primary resistance.Coils with 4 ohms or higher may be used, but maynot produce optimum output. We recommend the followingcoils for single and dualplug applications HI 4 Ignition With Single Plug Heads. You can also use two dualspark tower coils and ground one of the towers on eachcoil to the engine case or frame. You will have to fabricate abracket to mount the second coil. HI 4 Ignition With Dual Plug Heads. You will have to fabricate a bracket tomount the second coil. Crane FireWire spiral core wires are recommended for maximum performance. Do not use solid copperspark plug cables; they may cause interference with yourignition system and accessories.REMOVAL OF POINTS IGNITION EARLY MODELS PRIOR TO 19781. Turn ignition switch off and disconnect

batteryground cable. Save these items for later reuse.3. Note location of breaker plate. There is a V notchin the breaker plate used for alignment. When youinstall the HI 4, align the V notch in the same location. This should set the timing close enough tostart the engine. http://top-lan.com/upload/c6074b-service-manual.xml

Remove and save the two standoffsand washers items 45. Thank you, for helping us keep this platform clean. SINGLEFIRERACEIGNITION82100 Download Report View 1.037The HI4replaces the original equipment OE electronic ignitionsystem and is 50 states street legal California AirResources Board E.O. D22543 for the following applications 198493 FX Models 198593 FL Models 198693 XL Models Part number 82200 is true single fire, even atcranking speed. Each cylinder is fired independently and only on the compression stroke. Single fire operation increases engine power at high RPM, improves starting, and reduces the likelihood of backfiring at low RPM. The HI4 features stateoftheart RISC microcontroller technology that allows an adjustable advance andrev limit. A timing LED indicates static timing top deadcenter and gives diagnostic information. Two startingmodes are provided electric start and kick start. A tachoutput insures accurate tach readings even at the rev limit. Coils used with the HI4 must have at least 2 ohms primary resistance. Coils with 4 ohms or higher may be used, but maynot produce optimum output. We recommend the following coils for single and dualplug applications HI4 Ignition With Single Plug Heads. UseCrane 83001 coil. Use twoCrane 83006 coils. Crane FireWire spiral core wires are recommended for maximum performance. REMOVAL OF OE ELECTRONICIGNITION SYSTEM 1. Turn ignition switch off and disconnect batteryground cable. 2. Refer to Figure 1. Remove OE ignition moduleand wire harness items 14. You will disconnect wo wires at the coil, wire going to the VOESVacuum Operated Electrical Switch, ground wireat the module, and the 3 pin plug 20 that connects to the sensor plate. Refer to shop manual for locations. 3. Remove ignition cover plates and gasket items 59. The rivets will later be replaced with two supplied selfthreading screws. 4. In order to remove the sensor plate cable, the cable plug 20 must be removed first.

Use needlenose pliers to pull the terminals out of the plug. Then pull the cable through the exit hole at the bottom of the timing cover. INSTALLATION INSTRUCTIONS for HI4 SINGLE FIRE MOTORCYCLE IGNITIONPart Number 82200 530 Fentress Boulevard, Daytona Beach, FL 32114Tech Line 386 2586174 Fax 386 2586167Check our web site for updates www.cranecams.com WARNING 1996 and later models have a vehicle tilt sensor that shuts off theignition if the motorcycle rolls on itsside. There is a Vnotch in the sensor plate used for alignment. When you install the HI4, you should align the Vnotch in the same location. This should set thetiming close enough to start the engine. Removeand save the two standoffs and washers 10. Remove the sensor plate 11. Check your rotor 9 and verify that it is the correct part number. 1. Install HI4 system in place of OE sensor plate.Rotate the HI4 about 90 degrees to give betteraccess to the cable exit hole. Install the HI4 first, then push the cable through the hole. Align the Vnotch on the HI4 identically to the OE plate youremoved. Use the OE standoffs to secure theHI4. You must use lockwashers under the stand offs for proper clearance between the HI4 and cover plate. Do not fully tighten the standoffs untilthe timing has been set. 2. Route the HI4 wire harness along the frame railsup to the coil. Make sure that the harness will notbe chafed or burned by exhaust heat. Secure harness with tie wraps. Do not install timing cover. HI4 HOOKUPCrimp terminals and hardware are supplied for your convenience. Use the ring terminals for coil hookup. Usemalefemale quick disconnects for connections to the tachand vacuum switch VOES. Tape up the tach wire ifunused. Spark Plug Wires 2 18. Vacuum Operated Electrical Switch VOES 19. Refer to your servicemanual, or reconnect the battery and use a testlight or voltmeter. Tape up if unused. 7. The HI4 is grounded via the timing housing; aseparate ground connection is not required. 8. Reconnect battery ground cable.

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Verify properground connections to the frame and engine. VOES HOOKUPThe OE vacuum switch

VOES is normally an open circuit. Above 35 inchHg vacuum, the VOES closes and grounds the vacuum input on the OE ignition module. This increases the total advance generated by the ignitionmodule. Vacuum advance improves part throttle driveability and fuel economy. The 82200 HI4 must be used with a VOES. HI4 SETUP AND OPERATIONRefer to the label on the HI4. The unit has two DIP switches that select the advance curve and startingmode. The top switch sets the advance curve. NOTE 1996 and later models use a 2wire connector between the VOES and the OE harness. Connect one wirefrom the VOES switch to frame groundand connect the other wire to the VOESinput green wire on the HI4 harness. Im attempting a carb conversion on my 1999 X1. Problem is when timing the bike there is no way i can adjust the ignition far enough to set the timing correctly its way out. Im worried that ive bought the wrong ignition module or rotor. I think a solution might be to modify the rotor so i can rotate it further but i cant understand why i have to do that. Second issue I only went for dual fire cos i had just bought a new coil but now i see that Crane recommends I buy one of their coils for the correct resistance. You are prob on the wrong one which will not allow the cup to be in position to set it by the instructions. Rotate the engine around 1 rev then try it. The place where i had been checking it has three marks quite close to each other TDC, 20 degrees and 35 degrees. I think you should be looking for a straight line up and down for top dead center. The instructions or manual should tell you what marking is tdc for the year of your bike. The way i understood it i should be able to set the line up in the hole with the engine off and rotate the module until the light goes off to set initial timing. I would have thought that the rotor will end up in the same place after one revolution no.

http://www.decor-ada.com/images/bsa-scopes-manuals.pdf

Cant try it now cos im at work shhhh. Move the engine around one more time and you will be in postion to rotate until the light goes out. Ill try that as soon as i get home. Do you have any thoughts on my question about using the existing coil and wires Ill try that as soon as i get home. Do you have any thoughts on my question about using the existing coil and wires. I think the existing stuff is fine. As long as its dual fire you should be good to go. I ran a crane hi4 years ago with factory coil. I gave up on dropping cash in the coil, plug and spark plug department. To me, the cost to performance gain is not even close to worth it. Good luck Now i just have to get my timing light to work. I emailed Crane about the coil and wires not expecting a response. Think ill continue to use existing coil for testing anyway. Why do you want a timing light Lets say its 30 degrees..013 on the outside of your timing plate is one degree. Mark your static timing. Transfer.013 on to a small piece of paper and use that to advance or retarded. If you want 2 degrees it would be.026 on a dial caliber. Just transfer it someway thats easy to measure on your timing plate. Ive had horrible and no luck with timing lights. I think most guys do..039 is 3 degrees on the out side of the plate.about the gap of a spark plug. Hope my explanation is clear enough Lets say its 30 degrees..013 on the outside of your timing plate is one degree. Hope my explanation is clear enough I agree. Timing light method seems like a real pain to me nearly impossible to see any marks with the flashing light. Timing advance on my bike is 35 degrees. So i turn my Hi4 module clockwise by 4.55 milimeters is that right Thats like 14 degrees i think Where are you coming up with 35. I was getting confused because in the instructions it says to set static timing off the TDC mark.

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INITIAL STATIC TIMING PROCEDURE In most cases, aligning the V notch on the HI4 plate to the same location as the OE plate will set the timing close enough to start the engine. If the engine will not start or runs very rough, you can use the following static timing procedure. Remove spark plugs and turn the engine over until the TDC mark appears in observation hole. Ground spark plugs with an alligator clip so you will not shock yourself. Turn on the ignition but do not start the motorcycle. Loosen the standoffs holding HI4 and rotate the unit clockwise until the timing LED goes out. The point at which the timing LED goes off is TDC. Timing is now set approximately at TDC. Turn off

ignition and reinstall spark plugs. Once the engine has been started, you must set the timing with a timing light. SETTING ADVANCE TIMING USING STANDARD TIMING LIGHT This timing procedure requires that a VOES switch be connected to the HI4. For racing and early points applications without a VOES switch, you must ground the VOES input HI4 green wire while setting the timing. Connect a timing light to the front cylinder. Set the HI4 advance trimpot to midrange. Run the engine at 2,400 to 2,500 RPM. Adjust HI4 position until advance timing mark is centered in the observation hole. Tighten the standoffs and verify that timing has not shifted. Friend suggested the coil and I replaced it.. More importantly, the model of your ignition module. But, all is not lost.Dont forget to service the mechanical. Good luck and have nice day.. Hi Bill, for. Is this correct Answer questions, earn points and help others. Due to these legal restrictions this part cannot be shipped to California. Learn More If you have experienced a problem with our website. One cylinder not firing. Here is what I found, with the aid of a guy on Cranes USA tech line. Their website has no troubleshoot guide, and factory manual only applies to dualfire stock system on Shovels and Evos and Sportsters. I always carry a multimeter.

Obviously, swap the plug leads I always carry one spare long HT lead. That way you can test either cylinders spark with a new lead, then even swap the plugs. You will have to clean the nonfiring one as it will be contaminated with unburnt fuel. If that all checks out OK, you have eliminated the leads and plugs as problems. My bike did start on one cylinder on the kick in each case for testing, so I assume electric starts will do the same. Now test the coil. IGNITION OFF to check multimeter resistance. From the Hi4, the black wire attaches to the top FRONT plug terminal, the white to the bottom REAR plug terminal. Switch them, and of course switch the leads to match. Now, if the rear cylinder fails to fire off the top coil terminal which has fired the front cylinder previously you have eliminated the coil. The killer test for module failure came off Cranes tech line. Run the bike again, and get the test light. Ground the clip, and place the testtip on the rear wiring of both plug terminals i.e. the top and the bottom. The test light should flicker on and off like a Spanish disco i.e. the module is triggering the firing cycle. If you get no light or constant light at either terminal, the module is toast. I got a constant light off the terminal hosting the modules WHITE wire for rear cylinder, flickering light from frontjug wire BLACK terminal The tech line said charging or other electrical problems can cause voltage spikes which can irreparably damage their modules. This one has seen several regulator failures in the last 34 years, though none of them this year. Hope this helps someone else. This helps a lot. The HI replaces the O.E. original equipment electronic ignition system on 98 and later models and the points and mechanical advance on early models. The HI features stateoftheart RISC microcontroller technology that allows adjustable advance and rev limit. A tach output gives accurate tach readings even at the rev limit.

This part is not included with the HI installation kit and can be purchased from your local dealer. COIL AND SPARK PLUG CABLE CONSIDERATIONS We recommend replacing the O.E. coil. Coils used with the HI must have at least ohms primary resistance. Coils with ohms or higher may be used, but may not produce optimum output. We recommend the following coils for single and dualplug applications HI Ignition With Single Plug Heads. You can also use two dual spark tower coils and ground one of the towers on each coil to the engine case or frame. You will have to fabricate a bracket to mount the second coil. Figure. HarleyDavidson O.E. Points System 9 8. Circuit Breaker Cover Screws . Circuit Breaker Cover. Circuit Breaker Cover Gasket. Breaker Plate Screws . Circuit Breaker Cam Bolt 8. Breaker Plate Assembly 9. Breaker Cam. Advance Assembly. Gear Case Cover CRANE CAMS, INC. 0 Fentress Blvd., Daytona Beach, FL Tech Line 90 8 Fax 90 A 2 Figure. HarleyDavidson 989 O.E. Electronic System. Cover Screws . Timer Plate. Ignition Timer Cover. Ignition Module. Trigger Rotor. Advance Assembly. Timer Plate Screws . Spark Plug Wires . Shield 8. Sensor. Ignition Coil Terminal FX. Ignition Coil Terminal FL 9. Trigger Rotor Bolt 9 8 HI Ignition With Dual Plug Heads. Use two Crane 800 coils. Crane HIIntensity Reactive Core spark plug wires or equivalent spiral core wires are recommended for maximum performance. Do not use solid copper spark plug cables; they may cause interference with your ignition system and accessories.Disconnect wire going from breaker points to Coil negative terminal. Refer to Figure. Remove ignition cover plate, gasket, and hardware items . Save these items for later reuse. Note location of breaker plate. There is a V notch in the breaker plate used for alignment. When you install the HI, align the V notch in the same location. This should set the timing close enough to start the engine. Remove and save the two standoffs and washers items .

Remove the breaker plate assembly, wiring, cam, and advance assembly items .Refer to Figure. Disconnect wires going from ignition module item to coil . Remove ignition cover plate and hardware items and . Remove ignition module . Note location of timer plate . There is a V notch in the timer plate used for alignment. Remove the sensor, shield, timer plate, trigger rotor, and advance assembly items .Refer to Figure. Remove O.E. ignition module and wire harness items . You will disconnect two wires at the coil, wire going to the VOES Vacuum Operated Electrical Switch, ground wire at the module, and the pin plug 0 that connects to the sensor plate. Remove ignition cover plates and gasket items 9. The rivets will later be replaced with two supplied self threading screws. In order to remove the sensor plate cable, the cable plug 0 must be removed first. Use needle nose pliers to pull the terminals out of the plug. Then pull the cable through the exit hole at the bottom of the timing cover. Note location of sensor plate . There is a V notch in the sensor plate used for alignment. When you install the HI, you should align the V notch in the same location. Remove and save the two standoffs and washers . Remove the sensor plate item . HI INSTALLATION Refer to Figure. Check your rotor 9 for correct part number. Install HI system in place of O.E. breaker or sensor plate. Rotate the HI about 90 degrees to give better access to the cable exit hole in the gear case cover. On some early models it may be necessary to enlarge this hole. Install the HI first, then push the cable through the hole. Align the V notch on the HI same as the O.E. plate you removed. Use the O.E. standoffs to secure the HI. You must use lock washers under the standoffs for proper clearance between the HI and cover plate. HI Ignition System Installation. Buttonhead Screws . Gasket 9 8. Outer Cover. Inner Cover Screws . Gear Case Cover HI Unit Use Gasket Supplied.

Route the HI harness along the frame rails to the coil. Make sure that harness will not be chafed or burned by exhaust heat. Secure harness with tie wraps. HI HOOKUP Crimp terminals and hardware are supplied for your convenience. Use malefemale quick disconnects for connections to the tach and vacuum switch VOES. Tape up any unused wires. At no time should the brown tach wire come in contact with V. Damage will result. Identify switched volt wire and tach wire if equipped going to the coil. Refer to your service manual, or reconnect the battery and use a test light or voltmeter. The switched volt wire will be hot when the ignition key is turned on. Refer to Figure or, depending on your application. Connect the HI red wire and switched volt wire to Coil positive. Most motorcycle coils do not have terminals marked. Most singlefire coils use the center terminal for V and the outer two terminals for front and rear cyl Coil. For dualfire coils use one terminal for Coil positive and the other for Coil negative. Connect the HI black wire to the Coil terminal on the coil for the front cylinder. Connect the HI white wire to the Coil terminal on the coil for the rear cylinder. Connect the HI green wire to the vacuum switch Figure, item 8, if used. Connect the HI brown wire to the tach wire, if equipped with a tachometer. Tape up if unused. The HI is grounded via the timing housing; a separate ground connection is not required. 8. Reconnect battery ground cable. Verify proper ground connections to the frame and engine. VACUUM SWITCH HOOKUP READ CAREFULLY The HD O.E. vacuum switch VOES is normally an open circuit. Above inchhq vacuum, the VOES closes and grounds the vacuum input on the HD module. This increases the total advance generated by the O.E. ignition module. Vacuum advance improves part throttle driveability and fuel economy. WHEN USING A VOES, MAKE SURE THAT THE VOES IS CONNECTED AND FUNCTIONING PROPERLY PRIOR TO SETTING THE TIMING A 5 Street Driven Models With O.E.

Vacuum Switch VOES. We recommend that you connect the VOES to the HI. This will give you the

best fuel economy and driveability, while protecting your engine from detonation. 99 models use a wire connector between the VOES and the vehicle harness. Connect one of these wires from the VOES switch to frame ground and connect the other wire to the VOES input green wire on the HI harness. Street Driven Models Without O.E. Vacuum Switch VOES. This includes most models prior to 98. Fuel economy and driveability will be improved if you install a VOES and connect it to the HI. Figure Figure. HI. HI Single Fire Fire System Hookup with Single Plug Heads O.E. WHITE WIRE TO COIL IGNITION SWITCH VOLT BATTERY HI IGNITION MIN SPK ADV REV LIM REAR CYL RACE ONLY KICK MAX SINGLE FIRE RACE IGNITION 80 ALL OE POINTS ELEC TIMING LED HI BLACK RED TO IGNITION SWITCH FRONT SPARK PLUG HI RED WIRE WHITE HI BLK WIRE CRANE 800 COIL IF TACH OR V.O.E.S. ARE NOT USED, TAPE UP THE CORRESPONDING WIRE. Tape up the unused green vacuum switch wire from the HI or refer to the section EXTER NAL RETARD INPUT CAPA BILITY FOR RACE ONLY ADVANCE CURVE later in these instructions. HI SETUP AND OPERATION Refer to the label on the HI. Set the two switches for your type of engine and starting preference. Kick start mode fires the first cylinder for quickest starting. Electric start mode delays firing for revolutions of the crankshaft for smoother starts and less strain on the starter. Trimpots on the HI allow adjustment of advance and RPM limit settings. Use the screwdriver supplied in the parts kit to adjust the trimpots. Each trimpot has two slots; the end of one of the slots has two small dots on either side this is the pointer that indicates the setting of the trimpot. Each trimpot can be adjusted over a range of a bit less than one full turn. At the ends of the adjustment range, mechanical stops prevent further rotation of the trimpot.

DO NOT ATTEMPT TO TURN THE TRIMPOTS PAST THEIR LIMITS A 6 The advance curve is adjustable over a limited range via the advance trimpot. Advance curves are given in Figures 8 and 9. Each set of advance curves includes minimum and maximum curves. The actual advance curve will be between the minimum and maximum curves depending on advance trimpot setting. If you have a passenger or are using low octane gasoline, minimum advance will reduce spark knock. Maximum advance will give higher performance, but may require the use of high octane gasoline. This feature allows slight offset of rear cylinder timing for critical race applications. Normally, the rear cylinder offset trimpot should be set to zero. Figure. HI Single Fire System Hookup with Dual Plug Heads Figure. HI Single Fire System Hookup with Dual Plug Heads O.E. WHITE WIRE TO COIL IGNITION SWITCH VOLT BATTERY HI IGNITION CRANE 800 OR SIMILAR DUAL TOWER COILS SHOWN BLACK RED WHITE FRONT COIL AND SPARK PLUGS REAR COIL AND SPARK PLUGS The RPM limit is adjustable from,000 to 9,000 RPM. Use a safe RPM limit for your engine. The timing LED should light up when the ignition key is turned on. The timing LED will go off when the crankshaft is rotated past TDC. During cranking, the LED will blink. TIMING MARKS The TDC and advance timing marks are located on the crankshaft. Refer to Figure for typical timing marks. Early Style includes most 980 and earlier models. Late Style includes most 989 models. Please refer to the shop manual for your model for details. If the shop manual is not available, remove spark plugs, turn engine until front piston is at TDC on compression stroke and identify TDC mark on the flywheel. Refer to Figure and find the diagram with a matching TDC mark. Use the corresponding advance mark shown in the diagram. 99 models 999 for export models have a timing mark at 0 BTDC for setting the timing with the O.E. ignition module. Do not use this mark for setting the timing on the HI.

In MIN SPK ADV REV LIM REAR CYL RACE ONLY KICK MAX SINGLE FIRE RACE IGNITION 80 ALL OE POINTS ELEC TIMING LED HI IF TACH OR V.O.E.S. ARE NOT USED, TAPE UP THE CORRESPONDING WIRE. Use this mark to set the timing with a timing light as described below. OPTIONAL STATIC TIMING PROCEDURE In most cases, aligning the V notch on the HI plate to the same location as the O.E. plate will set the timing close enough to start the engine. If the engine will not start or runs very rough, you can use the following static timing procedure A 7 Remove spark plugs and turn engine until TDC mark appears in observation hole. Turn on ignition. Loosen the standoffs holding HI and rotate unit clockwise until timing LED goes out. The point at which LED goes off is TDC. Turn off ignition and reinstall spark plugs. Figure. Top Dead Center TDC and Front Cylinder Advance Marks for Various Models Figure. Top Dead Center TDC and Front Cylinder Advance Marks for Various Models Early Style Front Cylinder TDC Mark Front Cylinder Advance Mark Late Style Front Cylinder TDC Mark Front Cylinder Advance Mark Style Front Cylinder TDC Mark Front Cylinder. Front ADVANCE TIM ING USING TIMING LIGHT Connect a timing light to the front cylinder. Front Cylinder TDC Mark Set the HI advance trimpot to midrange. Run the engine at,00 to,00 RPM. Adjust HI position until advance timing mark is centered in the observation hole. SETTING PRECISE ADVANCE TIMING FOR RACING USING DIAL BACK TIMING LIGHT Determine the advance you want at,00 RPM. Use a dialback timing light. Connect the dialback timing light to the front cylinder. Set the HI advance trimpot full clockwise for maximum advance. Run the engine at,00 RPM. Adjust HI position until TDC timing mark is centered in the observation hole. You will now have the amount of advance you dialed into the timing light. 000 Front Cylinder 0 Mark DO NOT USE Front Cylinder Mark Tighten the standoffs and verify that timing has not shifted. Most dialback timing lights will be compatible with single fire systems.

ADVANCE CURVE SETUP After you have set the timing as explained above, set the HI advance trimpot to desired position. If you run 9 octane gasoline, you can usually leave the trimpot full clockwise for maximum advance and performance without spark knock. COVER PLATE ASSEMBLY You can reuse the O.E. hardware, except use the supplied Crane gasket to provide proper clearance for the HI. For models with a riveted outer cover, use the supplied selfthreading screws in place of the rivets TROUBLESHOOTING Did the engine run properly before installation of the HI. If not, remove the HI, reinstall the O.E. ignition or another known good unit and then find and correct the original problem. Did the HI function correctly before the problem occurred. If the answer is yes, did you change anything that may have affected it. Try going back to the last setup that worked OK to help isolate the problem. If the engine will not start, or runs rough or intermittently, use the following checklist steps ENGINE WILL NOT Check that timing LED lights up when ignition key is A 8 first turned on. If not, HI may be defective. If the timing LED blinks, but engine will not start, recheck all wire harness connections or replace coils. These test plugs come with an alligator clip that must be attached to frame or engine ground. Use a length of spark plug wire to connect the test plug to the coil. MISFIRE OR INTERMITTENT OPERATION Field experience has shown that popping back through the carburetor, misfiring, and intermittent failure especially after the engine gets hot are usually not caused by electrical problems within the HI.

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