

TECHNICAL - HID LAMP/BALLAST FAULT FINDING CHART



First identify the type of problem, then test for the cause by following the numerical sequence shown. (ie: 1, then 2, etc).

PROBLEM	LAMP TYPE	CIRCUIT TYPE	A	B	C	D	E	F	G	H	I
			End of lamp life	Incorrect type of lamp	New lamp not yet run in properly	Mains supply current capacity	Mains supply voltage dips	Photo-control switching incorrectly	Ballast failed	Capacitor failed	Ignitor failed
Lamps won't start - single luminaires	MV MH	Reactor Reactor CWA	1	5						5	
	HPS	Reactor CWA	1	6						7	
Lamps won't start - groups of luminaires (or brand new installations)	MV MH	Reactor Reactor CWA		1							
	HPS	Reactor CWA		1							
Lamps cycling on and off - single luminaires	MV MH	Reactor Reactor CWA	3								
	HPS	Reactor CWA	1								
Lamps cycling on and off - groups of luminaires	MV MH	Reactor Reactor CWA		1							
	HPS	Reactor CWA		1							
Different lamp colours	MV MH HPS		2 2	1 1	3		4				

A: END OF LAMP LIFE At the end of a lamp's life, the voltage requirements exceed the output ability of the ballast. The usual failure mode for Mercury lamps is low light output, followed by failure to start. For Metal Halide and Sodium, imminent failure causes low or varying light levels, colour shifts, and lamp instability (cycling on and off). It should be understood that in the early stages of failure, the lamp may operate for many hours before cycling "off" - the "on" period steadily decreases until the lamp fails completely. Cycling lamps should be replaced immediately to prevent ballast or ignitor damage.

B: INCORRECT LAMP Lamp's wattage, lamp voltage and current, burning position and type must ALL be compatible with the control equipment used to run it. Problems with lamp starting can also be caused by using a lamp with internal ignitor in a circuit which also has an ignitor, or vice-versa. New (but incorrect) lamps often strike and run OK for many hours, then start to give problems like poor starting, lamp cycling and colour differences.

C: NEW LAMP NOT YET RUN-IN PROPERLY New lamps go through a burn-in period, which may extend for up to 100 hours or more. The usual result is noticeable colour variation between lamps. Metal Halide lamps are noted for this, but the colour will stabilise as the burn-in period ends. It is important to understand that variations to colour will always be noticed between lamps from different manufacturers, and between old and new lamps of the same type.

D: MAINS SUPPLY CURRENT CAPACITY The ability of the mains to supply sufficient current and the correct voltage is critical in HID lighting circuits. When Reactor control gear starts, the current drawn exceeds the normal running current. As CWA gear starts the current drawn slowly increases until the lamps are fully lit. In all cases the mains supply must be capable of meeting the maximum current draw of the particular circuit, whilst providing the correct rated voltage.

E: MAINS SUPPLY VOLTAGE DIPS The usual cause of voltage dips is overloaded circuits, and the starting of large motors and welders. Mild dips usually only cause a lamp colour shift, but severe dips will cause the lamps to extinguish. The voltage dip tolerance of Reactor ballasts is much lower than CWA control gear.

F: PHOTO-CONTROL SWITCHING INCORRECTLY Problems can occur from electrical failure, or from an incorrect amount of light reaching the photocell. First, cover the eye of the cell with electrical tape to verify fixture and cell operation. If the fixture fails to operate, electrically bypass the photocell to identify the problem source. Problems with light reaching the cell can be solved by re-positioning the cell or fixtures, or by using special cell caps to regulate the light.

G: BALLAST FAILED Ballasts are surprisingly rugged devices, and usually a visual check will confirm if the ballast is damaged or not. Repeated failures (often in conjunction with capacitor failures) are usually caused by high amplitude spikes on the mains supply, which can be traced with the use of a scope and the Power Company's assistance. Note: Ballast failure due to overheating, which is caused by not replacing failed lamps immediately, is not covered by the manufacturer's warranty.

H: CAPACITOR FAILED In Reactor circuits the capacitor is used as a power factor correction device, so open circuits will not cause operational faults. In CWA circuits the capacitor is fundamental to operation, and the lamp will not operate with a faulty capacitor. To test a capacitor, substitute a known good unit.

I: IGNITOR FAILED Ignitors are required in Reactor Metal Halide, Reactor Sodium and CWA Sodium circuits to generate the required lamp starting voltages. Ignitors are not required for most CWA Metal Halide circuits. To test an ignitor, substitute a known good unit. It should be noted that the ignitor and lamp must be EXACTLY matched. Ignition voltage varies from 800 to 5000 Volts, and the duration of and number of starting pulses is critical for correct starting. Many older ignitors and systems will not reliably strike the more modern high-tech HID lamps (especially from Europe) which are becoming more widely used, causing unexplained starting problems.

The information contained here is given in good faith, as a guide to assist in determining the most probable cause for problems with HID installations. In some cases there may be other factors involved, or more than one cause, so this guide may not be definitive in finding the actual cause.



Hid Lamp Troubleshooting Guide

Puja Mehta



Hid Lamp Troubleshooting Guide:

Uncover the mysteries within Explore with is enigmatic creation, **Hid Lamp Troubleshooting Guide** . This downloadable ebook, shrouded in suspense, is available in a PDF format (*). Dive into a world of uncertainty and anticipation. Download now to unravel the secrets hidden within the pages.

<https://staging.conocer.cide.edu/data/virtual-library/index.jsp/europe%20review%20200102%20the%20economic%20and%20busineb%20report%20world%20of%20information.pdf>

Table of Contents Hid Lamp Troubleshooting Guide

1. Understanding the eBook Hid Lamp Troubleshooting Guide
 - The Rise of Digital Reading Hid Lamp Troubleshooting Guide
 - Advantages of eBooks Over Traditional Books
2. Identifying Hid Lamp Troubleshooting Guide
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Hid Lamp Troubleshooting Guide
 - User-Friendly Interface
4. Exploring eBook Recommendations from Hid Lamp Troubleshooting Guide
 - Personalized Recommendations
 - Hid Lamp Troubleshooting Guide User Reviews and Ratings
 - Hid Lamp Troubleshooting Guide and Bestseller Lists
5. Accessing Hid Lamp Troubleshooting Guide Free and Paid eBooks
 - Hid Lamp Troubleshooting Guide Public Domain eBooks
 - Hid Lamp Troubleshooting Guide eBook Subscription Services
 - Hid Lamp Troubleshooting Guide Budget-Friendly Options

6. Navigating Hid Lamp Troubleshooting Guide eBook Formats
 - ePub, PDF, MOBI, and More
 - Hid Lamp Troubleshooting Guide Compatibility with Devices
 - Hid Lamp Troubleshooting Guide Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Hid Lamp Troubleshooting Guide
 - Highlighting and Note-Taking Hid Lamp Troubleshooting Guide
 - Interactive Elements Hid Lamp Troubleshooting Guide
8. Staying Engaged with Hid Lamp Troubleshooting Guide
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Hid Lamp Troubleshooting Guide
9. Balancing eBooks and Physical Books Hid Lamp Troubleshooting Guide
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Hid Lamp Troubleshooting Guide
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Hid Lamp Troubleshooting Guide
 - Setting Reading Goals Hid Lamp Troubleshooting Guide
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Hid Lamp Troubleshooting Guide
 - Fact-Checking eBook Content of Hid Lamp Troubleshooting Guide
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
 - Integration of Multimedia Elements

- Interactive and Gamified eBooks

Hid Lamp Troubleshooting Guide Introduction

Hid Lamp Troubleshooting Guide Offers over 60,000 free eBooks, including many classics that are in the public domain.

Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. Hid Lamp Troubleshooting Guide Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain.

Hid Lamp Troubleshooting Guide : This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications.

Internet Archive for Hid Lamp Troubleshooting Guide : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books.

Free-eBooks Hid Lamp Troubleshooting Guide Offers a diverse range of free eBooks across various genres. Hid Lamp Troubleshooting Guide Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes.

Hid Lamp Troubleshooting Guide Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Hid Lamp Troubleshooting Guide, especially related to Hid Lamp Troubleshooting Guide, might be challenging as theyre often artistic creations rather than practical blueprints.

However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Hid Lamp Troubleshooting Guide, Sometimes enthusiasts share their designs or concepts in PDF format.

Books and Magazines Some Hid Lamp Troubleshooting Guide books or magazines might include. Look for these in online stores or libraries. Remember that while Hid Lamp Troubleshooting Guide, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading.

Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Hid Lamp Troubleshooting Guide eBooks for free, including popular titles.

Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books.

Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Hid Lamp Troubleshooting Guide full book , it can give you a taste of the authors writing style.

Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of Hid Lamp Troubleshooting Guide eBooks, including some popular titles.

FAQs About Hid Lamp Troubleshooting Guide Books

1. Where can I buy Hid Lamp Troubleshooting Guide books? Bookstores: Physical bookstores like Barnes & Noble, Waterstones, and independent local stores. Online Retailers: Amazon, Book Depository, and various online bookstores offer a wide range of books in physical and digital formats.
2. What are the different book formats available? Hardcover: Sturdy and durable, usually more expensive. Paperback: Cheaper, lighter, and more portable than hardcovers. E-books: Digital books available for e-readers like Kindle or software like Apple Books, Kindle, and Google Play Books.
3. How do I choose a Hid Lamp Troubleshooting Guide book to read? Genres: Consider the genre you enjoy (fiction, non-fiction, mystery, sci-fi, etc.). Recommendations: Ask friends, join book clubs, or explore online reviews and recommendations. Author: If you like a particular author, you might enjoy more of their work.
4. How do I take care of Hid Lamp Troubleshooting Guide books? Storage: Keep them away from direct sunlight and in a dry environment. Handling: Avoid folding pages, use bookmarks, and handle them with clean hands. Cleaning: Gently dust the covers and pages occasionally.
5. Can I borrow books without buying them? Public Libraries: Local libraries offer a wide range of books for borrowing. Book Swaps: Community book exchanges or online platforms where people exchange books.
6. How can I track my reading progress or manage my book collection? Book Tracking Apps: Goodreads, LibraryThing, and Book Catalogue are popular apps for tracking your reading progress and managing book collections. Spreadsheets: You can create your own spreadsheet to track books read, ratings, and other details.
7. What are Hid Lamp Troubleshooting Guide audiobooks, and where can I find them? Audiobooks: Audio recordings of books, perfect for listening while commuting or multitasking. Platforms: Audible, LibriVox, and Google Play Books offer a wide selection of audiobooks.
8. How do I support authors or the book industry? Buy Books: Purchase books from authors or independent bookstores. Reviews: Leave reviews on platforms like Goodreads or Amazon. Promotion: Share your favorite books on social media or recommend them to friends.
9. Are there book clubs or reading communities I can join? Local Clubs: Check for local book clubs in libraries or community centers. Online Communities: Platforms like Goodreads have virtual book clubs and discussion groups.
10. Can I read Hid Lamp Troubleshooting Guide books for free? Public Domain Books: Many classic books are available for free as they're in the public domain. Free E-books: Some websites offer free e-books legally, like Project Gutenberg or Open Library.

Find Hid Lamp Troubleshooting Guide :

europa review 200102 the economic and business report world of information

europa cycling the 20 classic races

ethics and environmental policy theory meets practice

etruria early rome art of the world

ethnicity at work

ethics in social marketing

ethnic broadcasting in the united states

eurojustice actes de la conference de ro

europa asiapacific political security and economic perspectives

eucharistic meditations extracts from the writings and instructions of saint john vianney

ethics and nuclear deterrence

europa community aeronautics research

europa communities global french english

ethnic conflicts and the nation-state

ethical practice in psychiatry and the law

Hid Lamp Troubleshooting Guide :

Textbook 1 (National Curriculum Ginn ... - Amazon Buy Textbook 1 (National Curriculum Ginn Mathematics 6+ (Original Edition)) on Amazon.com ☐ FREE SHIPPING on qualified orders. National Curriculum Ginn Mathematics Textbook 1 Level 6 ... National Curriculum Ginn. Mathematics Textbook 1 Level. 6 National Curriculum Ginn. Mathematics. We believe that everyone should have access to. National ... Textbook 1 (National Curriculum Ginn Mathematics) National Curriculum Ginn Mathematics 6: Textbook 1 (National Curriculum Ginn Mathematics) ; Publication date. April 1, 1992 ; ISBN-10. 0602251850 ; ISBN-13. 978- ... National Curriculum Ginn Mathematics Textbook 1 Level 6 ... National Curriculum Ginn Mathematics Year 6 Textbook 1: Textbook 1 Level 6 (NATIONAL GINN CURRICULUM MATHEMATICS). Book Binding:Paperback. 'National Curriculum Ginn Mathematics by National Curriculum Ginn Mathematics Year 6 Textbook2 (NATIONAL GINN CURRICULUM MATHEMATICS). by unknown. Condition: Used - Acceptable; Binding: Paperback ... National Curriculum Ginn Mathematics Year 6 Textbook2 ... National Curriculum Ginn Mathematics Year 6 Textbook2 (NATIONAL GINN CURRICULUM MATHEMATICS) - ISBN 10: 0602251869 - ISBN 13: 9780602251864 - Ginn - 1992 ... National Curriculum

Textbooks: Maths (Year 6) This Maths textbook links directly to the National Curriculum and mixes clear accessible teaching with opportunities to talk about and practice key ... National Curriculum Ginn Mathematics: Textbook 1 Level 6 ... National Curriculum Ginn Mathematics: Textbook 1 Level 6 (NATIONAL GINN CURRICULUM MATHEMATICS) ... Textbook 1 Level 6 (NATIONAL GINN CURRICULUM MATHEMATICS). Mathematics programmes of study: key stages 1 and 2 The national curriculum for mathematics reflects the importance of spoken language in pupils' development across the whole curriculum - cognitively, socially ... Owner's & Service Manuals Get quick and easy access to information specific to your Kawasaki vehicle. Download official owner's manuals and order service manuals for Kawasaki vehicles ... 2005 KFX 400 Service Manual Apr 20, 2013 — Just noticed that the manual you up loaded is for the suzuki 400. everything in there is interchangeable with the kfx400 because it's the same ... 2004-2008 DVX400 KFX400 LT-Z400 Online ATV Service ... The Cyclepedia Press LLC Z400 ATV online service manual provides repair information for Arctic Cat DVX400, Kawasaki KFX400 and Suzuki LT-Z400 sport ATVs. Our ... ATV Kawasaki Download Service and Repair ... Original Workshop Service Repair Manual for Kawasaki KFX 400 ATV. This ... ATV - Online Shop/Service/Repair Manuals Download. 2005 Kawasaki KAF400 Mule 600 ... looking for a kfx 400 free downloadable manual Apr 20, 2009 — Kawasaki - looking for a kfx 400 free downloadable manual - Just bought a 04 kfx 400 looking to download a manual for free any one no where? LT-Z400 This manual contains an introductory description on the SUZUKI LT-Z400 and procedures for its inspection, service and overhaul of its main components. Kawasaki KFX400 Repair Manuals Powersport Repair Manual by Haynes Manuals®. Written from hands-on experience gained from the complete strip-down and rebuild of a ... SUZUKI LTZ 400 SERVICE MANUAL Pdf Download Page 1 * This manual is written for persons who have enough knowledge, skills and tools, including special tools, for servicing SUZUKI vehicles. All Terrain Vehicle Service Manual Special tools, gauges, and testers that are necessary when servicing Kawasaki vehicles are introduced by the Service Manual. Genuine parts provided as spare ... Repair Manuals & Guides For Kawasaki KFX400 2003 - 2006 Detailed repair guides and DIY insights for 2003-2006 Kawasaki KFX400's maintenance with a Haynes manual. Surveying Principles and Applications Textbook Solutions Surveying Principles and Applications textbook solutions from Chegg, view all supported editions ... Surveying Principles and Applications 8th Edition by Barry F ... Solutions manual for surveying with construction ... Apr 27, 2018 — Solutions Manual for Surveying with Construction Applications 8th Edition by Kavanagh ISBN 9780132766982 Full download: ... Surveying With Construction Applications 8th Edition ... Surveying with Construction Applications 8th Edition Kavanagh Solutions Manual - Free download as Word Doc (.doc / .docx), PDF File (.pdf), Text File (.txt) ... Surveying Principles And Applications Solution Manual Select your edition Below. Textbook Solutions for Surveying Principles and Applications. by. 8th Edition. Author: Barry F Kavanagh. 221 solutions available. Surveying: Principles and Applications, 8th Edition. by D Duffy · 2009 — "Surveying" is organized into three parts: Surveying Principles, Remote Sensing and Surveying Applications. Chapter 1 of

Part 1, "Basics of Surveying," assumes ... Surveying: Principles and Applications by Kavanagh, Barry F. Surveying: Principles and Applications, Eighth Edition presents a clear discussion of the latest advances in technological instrumentation, surveying ... 260331285-Solution-Manual-Surveying-Principles.pdf ... CHAPTER 01-Basics of Surveying 1.1How do plane surveys and geodetic surveys differ? Plane surveying assumes all horizontal measurements are taken on a single ... Surveying With Construction Applications 8th Edition ... Surveying With Construction Applications 8th Edition Kavanagh Solutions Manual - Free download as PDF File (.pdf), Text File (.txt) or read online for free. Download Solution manual for Surveying with Construction ... Download Solution manual for Surveying with Construction Applications 8th Edition by Barry Kavanagh and Diane K · 4.8 STATION BS · HI · IS · FS · ELEVATION · BM S101. A Survey of Mathematics with Applications - 8th Edition Find step-by-step solutions and answers to A Survey of Mathematics with Applications - 9780131354814, as well as thousands of textbooks so you can move ...