

ACSM's

Metabolic Calculations Tutorial

CD-ROM



www.acsm.org

$$\text{V}_{\text{O}_2} = \text{V}_\text{E} \times [0.265 \times (1.00 - \text{F}_{\text{E}}\text{O}_2) + 0.73 \times \text{F}_{\text{E}}\text{O}_2]$$
$$= \text{V}_\text{I} \times [0.2095 \times (0.79 - \text{F}_{\text{E}}\text{O}_2) + 0.79 \times \text{F}_{\text{E}}\text{O}_2]$$

Acsms Metabolic Calculations Tutorial Cd Rom Version

1 0a

Nelson Kwok Ng

Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a:

ACSM's Metabolic Calculations Tutorial Leonard A. Kaminsky,2001-02-01 Now you can learn the principles and processes of metabolic calculations with help from ACSM in a convenient CD ROM format This CD ROM gives you the power to solve problems using ACSM metabolic equations learn the fundamentals of estimating energy requirements during exercise determine outcome measures for common tests used in physical fitness practice Based on ACSM s Guidelines for Exercise Testing and Prescription the program contains two learning modules Module one covers Basic Algebra Principles Basic Energy Expenditures Principles and ACSM Metabolic Equations Fundamentals The second module contains an interactive quiz and advanced applications These features shorten the learning curve and help you retain more 20 plus animations for a better understanding of fundamentals explanations and feedback for correct AND incorrect answers so the learning process continues through the self assessment links for quick access to key information from the sections on Basic Algebra Basic Principles and Limitations handy pop up calculator for solving equations and a glossary for reviewing key terms related to metabolic calculations System requirements Windows 95 Pentium 60 mHz 8 MB memory RAM 2X CD ROM more than 5 MB free hard disk space Compatibility BlackBerry OS 4 1 or Higher iPhone iPod Touch 2 0 or Higher Palm OS 3 5 or higher Palm Pre Classic Symbian S60 3rd edition Nokia Windows Mobile Pocket PC all versions Windows Mobile Smartphone Windows 98SE 2000 ME XP Vista Tablet PC

Metabolic Calculations, Simplified David P. Swain,Brian C.

Leutholtz,1997 At last here s a simplified version of the ACSM metabolic equations and an easier way to solve them Drs Swain and Leutholtz provide straightforward formulas for figuring the caloric expenditure or oxygen consumption during walking running stationary cycling and bench stepping This handy reference also shows how to apply the equations to other pieces of exercise equipment calculate heart rate prescriptions and estimate maximal oxygen consumption from exercise tests In addition to simplifying difficult math problems without sacrificing the underlying content of the equations or the accuracy of their answers the authors reinforce their formulas with many sample problems and case studies

METCALC

Software Nelson Kwok Ng,1995-01-01 This software package provides a quick simple affordable and effective means to learning the metabolic calculations associated with exercise and fitness METCALC Software features more than 60 routines for metabolic calculation most of the major fitness test protocols used in assessment and programming It includes calculations for a number of classic widely used fitness tests as well as some newer tests The software provides on screen nomograms and graphs that help users determine test results and interpret data quickly METCALC also includes a tutorial section that carefully guides users through the American College of Sports Medicine ACSM fundamentals of metabolic calculations The accompanying manual explains the objectives of each of the tests included in the software shows how to use the software for quick calculations and explains how the calculations are derived Used together the manual and software create a powerful instructional tool for students and professionals METCALC is a practical time saving package for health

and fitness technologists exercise physiologists sports medicine specialists cardiac rehabilitation professionals and instructors who determine metabolic calculations as part of their ongoing practice and research Candidates preparing for the ACSM certification and other health fitness certifications will find the package to be a valuable preparation tool METCALC is also an excellent supplemental resource for exercise physiology and exercise test technology courses System Requirements METCALC software is an MS DOS program and will run only on those operating systems that have a DOS mode This software will not run on W2k or XP

Uncover the mysteries within Crafted by is enigmatic creation, Discover the Intrigue in **Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a** . This downloadable ebook, shrouded in suspense, is available in a PDF format (Download in PDF: *). Dive into a world of uncertainty and anticipation. Download now to unravel the secrets hidden within the pages.

https://new.webyeshiva.org/public/Resources/fetch.php/manual_repair_cadillac_deville_2000.pdf

Table of Contents Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

1. Understanding the eBook Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
 - The Rise of Digital Reading Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
 - Advantages of eBooks Over Traditional Books
2. Identifying Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
 - 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 Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
 - User-Friendly Interface
4. Exploring eBook Recommendations from Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
 - Personalized Recommendations
 - Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a User Reviews and Ratings
 - Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a and Bestseller Lists
5. Accessing Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a Free and Paid eBooks
 - Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a Public Domain eBooks
 - Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a eBook Subscription Services
 - Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a Budget-Friendly Options
6. Navigating Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a eBook Formats

- ePub, PDF, MOBI, and More
- Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a Compatibility with Devices
- Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a Enhanced eBook Features

7. Enhancing Your Reading Experience

- Adjustable Fonts and Text Sizes of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
- Highlighting and Note-Taking Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
- Interactive Elements Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

8. Staying Engaged with Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

- Joining Online Reading Communities
- Participating in Virtual Book Clubs
- Following Authors and Publishers Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

9. Balancing eBooks and Physical Books Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

- Benefits of a Digital Library
- Creating a Diverse Reading Collection Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

10. Overcoming Reading Challenges

- Dealing with Digital Eye Strain
- Minimizing Distractions
- Managing Screen Time

11. Cultivating a Reading Routine Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

- Setting Reading Goals Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
- Carving Out Dedicated Reading Time

12. Sourcing Reliable Information of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a

- Fact-Checking eBook Content of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a
- 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

Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a Introduction

In todays digital age, the availability of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether youre a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free access to course materials from the Massachusetts Institute of Technology, and the

Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a books and manuals for download and embark on your journey of knowledge?

FAQs About Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What is the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a is one of the best book in our library for free trial. We provide copy of Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a in digital format, so the resources that you find are reliable. There are also many eBooks of related with Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a. Where to download Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a online for free? Are you looking for Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a PDF? This is definitely going to save you time and cash in something you should think about.

Find Acsms Metabolic Calculations Tutorial Cd Rom Version 1 0a :

[manual repair cadillac deville 2000](#)

[used toyota tacoma manual transmission for sale](#)

ballbusting girlfriend cbt castration femdom facesitting ballbuster

mercruiser alpha manual

xtreme paper add maths

2013 maths grade 10 march common question paper

ohio school state report card

bosch acs 650 user manual

lamborghini repair manual

romeo and juliet study guide question

business studies september question paper 2014 grade 12

personification about the rainforest

90 240sx dashboard wiring dieagram

method statement for blinding pcc concrete

distributive property game

Acsm Metabolic Calculations Tutorial Cd Rom Version 1 0a :

knights and armor coloring book dover fashion - Oct 09 2023

web buy knights and armour colouring book dover fashion coloring book illustrated by smith a g isbn 0800759248438 from amazon s book store everyday low prices

knights and armor coloring book knights in armor - Nov 29 2022

web description details q a reviews category description for dover historical coloring books several of these are already listed separately in appropriate places in this

knights armor coloring book united art education - Dec 31 2022

web knights and armour colouring book dover fashion coloring book smith a g amazon in books

knights and armor coloring book dover fashion coloring book - May 24 2022

web knights and armor coloring book isbn 0486248437 ean13 9780486248431 language english release date may 1 1985 pages 48 dimensions 0 2 h x 10 7 1

knights and armor coloring book by a g smith - Sep 08 2023

web product description product details you can recapture the excitement of yesteryear s noblest battles with this remarkable pageant of dauntless knights and armor in

steam coloring pixels medieval pack - Nov 17 2021

knights and armor coloring book dover publications - Jun 24 2022

web with this book large coloring images of knights on horses knights with armor castles mansions and princesses too this activity book for young kids will keep them engaged

knights armor abebooks - Feb 18 2022

knights armor coloring book by smith abebooks - Sep 27 2022

web historically accurate renderings of vikings crusaders italian condottiere spanish foot soldiers and luminaries such as richard the lion hearted and henry the viii document

coloring page knight in armor edupics com - Oct 17 2021

knights and armour colouring book dover fashion - Aug 07 2023

web knights and armor coloring book a g smith courier corporation jan 1 1985 juvenile nonfiction 48 pages historically accurate renderings of vikings crusaders

pdf knights and armour colouring book academia edu - Mar 22 2022

web coloring page knight in armor coloring picture knight in armor free coloring sheets to print and download images for schools and education teaching materials img 9442

medieval knights in armor coloring book for kids and adults - Mar 02 2023

web knights and armor coloring book dover fashion coloring book by a g smith and a great selection of related books art and collectibles available now at abebooks com

knights and armor coloring help environment harvard edu - Jan 20 2022

knights and armor coloring book a g smith google books - Jun 05 2023

web you can recapture the excitement of yesteryear s noblest battles with this remarkable pageant of dauntless knights and armor in coloring book form defend

knights and armor coloring book dover books - May 04 2023

web 42 reproducible illustrations of warriors knights and the range of protective armor in use in europe from a d 100 to 1640 printed on bright white heavyweight paper that accepts

knights and armour colouring book dover fashion coloring - Jul 26 2022

web knights and armor coloring book dover fashion coloring book by a g smith and a great selection of related books art and collectibles available now at abebooks co uk

9780486248431 knights and armour colouring book dover - Oct 29 2022

web knights and armor coloring book dover fashion coloring book by a g smith isbn 10 0486248437 isbn 13 9780486248431 dover publications 1985 softcover

knights and armor coloring book amazon ca - Apr 03 2023

web knights and armor coloring book dover fashion coloring book by a g smith and a great selection of related books art and collectibles available now at abebooks co uk

knights and armour colouring book dover fashion coloring - Apr 22 2022

web this medieval themed book unlocks 20 additional levels for coloring pixels experience romanticised european history at its finest with this book from knights and armour

buy knights and armor coloring book book by a g smith - Dec 19 2021

knights and armor coloring book dover fashion coloring book - Aug 27 2022

web knights and armour colouring book see full pdf download pdf see full pdf download pdf related papers making an edition in an app barbara bordalejo

knights and armor coloring book dover publications - Jul 06 2023

web sep 18 2014 the medieval knights in armor coloring book for kids and adults is full of medieval knights anyone who loves knights and jousting will love the armor clad

knights and armor coloring book paperback barnes noble - Feb 01 2023

web more than 40 dramatic plates specially designed for you to color portray the wide range of protective armor in use in europe from about a d 100 to 1640 the attire of vikings

plana te terre les grands articles d universalis uniport edu - Feb 27 2022

web jul 21 2014 ce lieu privilégié est occupé par le soleil autour duquel la terre et les

planète terre les grands articles d universalis cultura - Feb 10 2023

web planète terre les grands articles d universalis 4 49 editeur encyclopaedia

les actualités terre futura - Dec 28 2021

web planète terre les grands articles d universalis by encyclopaedia universalis les

planète terre les grands articles d universalis by - Nov 07 2022

web planète terre les grands articles d universalis by encyclopaedia universalis march

planète terre les grands articles d universalis by - Apr 12 2023

web avant d être un concept la terre fut une donnée d abord la terre nourricière

plana te terre les grands articles d universalis pdf - Jun 02 2022

web avant d être un concept la terre fut une donnée d abord la terre nourricière

plana te terre les grands articles d universalis pdf - Jun 14 2023

web plana te terre les grands articles d universalis 5 5 been enormously influential in

planète terre les grands articles d universalis google books - Jul 15 2023

web encyclopaedia universalis sep 19 2016 science 60 pages avant d être un concept

plana te terre les grands articles d universalis - Aug 16 2023

web oct 8 2023 plana te terre les grands articles d universalis histoire

plana te terre les grands articles d universalis pdf - Jul 03 2022

web plana te terre les grands articles d universalis 5 5 particular interests in the religion

plana te terre les grands articles d universalis pdf yearbook - Mar 31 2022

web apr 18 2023 abrégé de géographie rédigé sur le nouveau plan d après le dernier

galilée et la place de la terre dans l univers les échos - Jan 29 2022

web les actualités terre par futura planète le magazine de notre planète

planète terre les grands articles d universalis google play - Sep 17 2023

web planète terre les grands articles d universalis ebook written by encyclopaedia

plana te terre les grands articles d universalis pierre larousse - Mar 11 2023

web plana te terre les grands articles d universalis as recognized adventure as

planète terre les grands articles d universalis by - Nov 26 2021

web avec le concours d un grand nombre de collaborateurs traité du lever des plans et de

terre la planète terre encyclopædia universalis - May 13 2023

web 1 2 3 4 5 6 sommaire avant d être un concept la terre fut une donnée d abord la

univers les planètes encyclopædia universalis - Sep 05 2022

web mar 21 2023 merely said the plana te terre les grands articles d universalis is

planète terre les grands articles d universalis by - Oct 06 2022

web les planètes planeta actimedia s a encyclopædia universalis france pour la

planète terre les grands articles d universalis ebook - Jan 09 2023

web sep 19 2016 avant d être un concept la terre fut une donnée d abord la terre

plana te terre les grands articles d universalis pdf uniport edu - Aug 04 2022

web mar 7 2023 terre les grands articles d universalis and numerous book collections

planète terre les grands articles d universalis by - May 01 2022

web plana te terre les grands articles d universalis is available in our book collection an

[planète terre les grands articles d universalis](#) - Dec 08 2022

web avant d être un concept la terre fut une donnée d abord la terre nourricière

[plana te terre les grands articles d universalis 2022 ce](#) - Oct 26 2021

c m y cm my cy cmy k gmc - Dec 07 2022

web explore chevy vehicle s owner manuals and guides to help guide you with understanding your chevy vehicle

[2021 3 0l diesel duramax supplement](#) - Jul 02 2022

web view and download chevrolet gmc 2013 duramax diesel owner s manual online 2013 chevrolet gmc duramax diesel 2013 duramax diesel automobile pdf manual

[2021 chevrolet silverado 2500 owner s manual](#) - Nov 25 2021

web diesel supplement v power outlets on page 5 9 w climate control systems with air conditioning on page 8 1 or climate control systems with heater only on page 8 4 if

[gmc duramax 3 0l supplement manual pdf](#) - Apr 11 2023

web view and download gmc duramax diesel 2016 supplement manual online duramax diesel 2016 automobile pdf manual download also for sierra 2017 express 2017

[chevrolet gmc 2014 duramax owner s manual pdf](#) - Jun 01 2022

web this supplement contains information specific to the unique components of the vehicle it does not explain everything you need to know about the vehicle read this supplement

2011 chevy chevrolet silverado 3500 duramax diesel - Dec 27 2021

web all of the various versions and trims of the truck are covered in the yearly chevrolet silverado owner s manual embedded on this site as pdfs engines for the original car

[gmc duramax diesel 2018 owner s manual supplement](#) - Aug 03 2022

web view and download chevrolet gmc 2014 duramax owner s manual online diesel supplement 2014 duramax automobile pdf manual download

[2011 chevy chevrolet silverado 2500 duramax diesel](#) - Feb 26 2022

web black plate 3 1 duramax diesel engine lml lgh 2011 introduction iii using this supplement this supplement contains information specific to the unique components

[chevrolet gmc 6 6l duramax diesel 2020 supplement](#) - Jun 13 2023

web view and download chevrolet gmc 6 6l duramax diesel 2020 supplement manual online gmc 6 6l duramax diesel 2020 engine pdf manual download

gmc duramax diesel 2016 supplement - Mar 10 2023

web using this supplement this supplement contains information specific to the unique components of the vehicle it does not explain everything you need to know about the

2011 chevrolet silverado owner manual m cdn dealereprocess org - Sep 23 2021

2020 chevrolet 6 6 duramax diesel supplement pdf - Jan 08 2023

web chevrolet silverado iv suburban suburban gmt k2yc tahoe tahoe gmt k2uc users manuals english 2 52 mb chevrolet gmc 3 0l duramax diesel engine supplement

00 introduction en us 1 imgix - Mar 30 2022

web view and download chevrolet duramax diesel engine 2011 user manual online diesel engine duramax diesel engine 2011 engine pdf manual download also for

2019 duramax diesel supplement pdf 2 48 mb user s manuals - May 12 2023

web chevrolet silverado gmt k2rc ec cc hc colorado colorado gmt700 express express gmt601 users manuals english 2 48 mb chevrolet gmc duramax diesel supplement

duramax diesel manual chevrolet - Aug 15 2023

web this manual contains information that pertains to the operation of your diesel engine it also contains your diesel maintenance schedule the sections in this manual correspond to

chevrolet duramax diesel engine 2011 user manual - Jan 28 2022

web the 2021 chevrolet silverado is an example of a fifth generation version of the pickup truck introduced in 2019 as it is the heavier duty version of the truck the engine options are

c m cy cmy k silverado owner s manual chevrolet - Sep 04 2022

web jan 25 2021 has anyone been able to find a source to download a digital copy of the 2021 supplement plenty of sources for the 2020 version but none for the 2021 it doesn t

c m y cm my cy cmy k chevrolet - Feb 09 2023

web this manual contains information that pertains to the operation of the diesel engine it also contains the diesel maintenance schedule the sections in this manual correspond to

2021 chevrolet 3l duramax diesel supplement pdf 2 52 mb - Nov 06 2022

web diesel engine see the duramax diesel supplement for additional and specific information on this engine if the vehicle has

the bi fuel engine see the silverado sierra bi fuel

manuals and guides vehicle support chevy chevrolet - Oct 05 2022

web view and download gmc duramax diesel 2018 owner s manual supplement online duramax diesel 2018 engine pdf
manual download

chevrolet silverado owner s manual manual directory - Oct 25 2021

chevrolet gmc duramax diesel supplement 2013 crc - Jul 14 2023

web this manual contains information that pertains to the operation of your diesel engine it also contains your diesel
maintenance schedule the sections in this manual correspond to

chevrolet gmc 2013 duramax diesel owner s manual - Apr 30 2022

web if the vehicle has the duramax diesel engine see the duramax diesel supplement for additional and specific information
on this engine if the vehicle is a hybrid see the hybrid