

# FLAP GATE DESIGN FOR AUTOMATIC UPSTREAM CANAL WATER LEVEL CONTROL

By Charles M. Burt,<sup>1</sup> Member, ASCE, Russdon Angold,<sup>2</sup> Mike Lehmkuhl,<sup>3</sup> and Stuart Styles,<sup>4</sup> Member, ASCE

**ABSTRACT:** The EXCEL design procedure for a simple hydraulic flap gate for automatic upstream canal water level control is provided. Basic configurations were developed in The Netherlands in the 1920s and have recently been used in Indonesia, the Dominican Republic, and Nigeria. Four irrigation districts in the San Joaquin Valley of California have constructed and installed over 60 properly functioning flap gates. The gates can be installed within 2 h, but require free discharge conditions and in practice are limited to controlling water depths of about 1 m or less.

## INTRODUCTION

The flap gate is a simple hydraulic automatic upstream water level control gate. Its simplicity is derived from ease of construction and maintenance—construction only requires flat plate and tubing fabrication, rather than curved surfaces as for other types of hydraulic automatic gates. The basic design of a flap gate is shown in Fig. 1. If designed properly, it will automatically maintain the upstream water level within a few centimeters. The gate must be installed in a free-flow condition. The proper operation of a flap gate requires that the gate-closing couple around the pivot point be exactly balanced by the gate-opening couple around that point, while maintaining the same upstream water level at all flow rates (e.g., all angles of opening). Fig. 2 illustrates these two couples. The gate-closing couple is formed by the mass of the gate and counterweight, and the gate-opening couple is formed by the pressure of the water against the faceplate.

Most work on flap gates originated in The Netherlands. Vlugter (1940) investigated various configurations such as the Begemann and Doell. Brouwer (1987) summarizes important design principles, including key dimension ratios. Raemy and Hager (1997) examined the opening and closing moments at various angles of opening, and Brans (1995) documented the use of such gates in Indonesia. Burt and Styles (1999) observed poorly maintained flap gates in an irrigation project in the Dominican Republic. Modrano and Pitter (1997) and Sweigard and Dudley (1995) worked on prototype flap gates (commonly known as Begemann gates) at the Water Delivery Facility of the Irrigation Training and Research Center (ITRC) at Cal Poly.

Since 1997, about 40 gates have been installed at the Chowchilla Water District (CWD) of California. The construction of the first CWD gates was based on the early Cal Poly prototypes, which were developed with support of the Mid-Pacific Region of the U.S. Bureau of Reclamation. Although many of the CWD gates performed well, some of the controlled water levels were different from those predicted by the early design

procedure. As a result of the discrepancies, ITRC developed the new design procedure explained in this paper. Gates based on the new design have also been installed in the Turlock Irrigation District (ID), Alta ID, and Broadview WD of California.

## PROCEDURES AND METHODS

### Pressure Distribution—General

The ITRC design program (an EXCEL spreadsheet) estimates the closing and opening couples of the gate at a variety of angles with a desired upstream water level. If one knows the mass and relative locations of all the steel members, the centroid of the mass can be determined from basic statics equations to compute the gate-closing couple.

The opening couple on a flap gate is more complex to com-

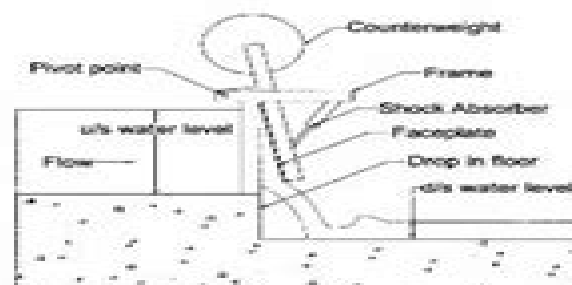


FIG. 1. Side View of Flap Gate

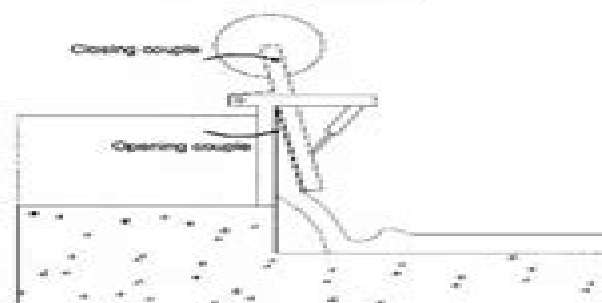


FIG. 2. Balance of Couples on Flap Gate

<sup>1</sup>Prof. and Chair, Irrig. Training and Res. Ctr., BioResource and Agric. Engrg. Dept., California Polytechnic State Univ., San Luis Obispo, CA 93407; E-mail: cburt@calpoly.edu

<sup>2</sup>Student, BioResource and Agric. Engrg. Dept., California Polytechnic State Univ., San Luis Obispo, CA.

<sup>3</sup>Electronic Technician, BioResource and Agric. Engrg. Dept., California Polytechnic State Univ., San Luis Obispo, CA.

<sup>4</sup>Dir., Irrig. Training and Res. Ctr., BioResource and Agric. Engrg. Dept., California Polytechnic State Univ., San Luis Obispo, CA.

# Flap Gate Design For Automatic Upstream Canal Water Level

**Camilla Rothe**



## **Flap Gate Design For Automatic Upstream Canal Water Level:**

**Modeling and Control of Hydrosystems** Xavier Litrico, Vincent Fromion, 2009-09-17 Open channel hydraulics are described by hyperbolic equations derived from laws of conservation of mass and momentum called Saint Venant equations. In conjunction with hydraulic structure equations these are used to represent the dynamic behavior of water flowing in rivers, irrigation canals and sewers. Building on a detailed analysis of open channel flow modeling, this monograph constructs control design methodologies based on a frequency domain approach. In practice, many open channel systems are controlled with classical input output controllers that are usually poorly tuned. The approach of this book, fashioning pragmatic engineering solutions for the control of open channels, is given rigorous mathematical justification. Once the control objectives are clarified, a generic control design method is proposed, first for a canal pool and then for a whole canal. The methods developed in the book have been validated on several canals of various dimensions up to a large scale irrigation canal.

*Irrigation Systems* Adrian Laycock, 2011 Of all the confrontations man has engineered with nature, irrigation systems have had the most widespread and far reaching impact on the natural environment. Over a quarter of a billion hectares of the planet are irrigated and entire countries depend on irrigation for their survival and existence. Considering the importance of irrigation schemes, it is unfortunate that until recently the technology and principles of design applied to their construction has hardly changed in 4 000 years. Modern thinking on irrigation engineering has benefited from a cross fertilization of ideas from many other fields including social sciences, control theory, political economics and agriculture. However, these influences have been largely ignored by irrigation engineers. Drawing on almost 40 years of experience of irrigation in the developing world, Laycock introduces new ideas on the design of irrigation systems and combines important issues from the disciplines of social conflict management and political thinking.

*Hydraulic Engineering of Dams* Willi H. Hager, Anton J. Schleiss, Robert M. Boes, Michael Pfister, 2020-11-05 Hydraulic engineering of dams and their appurtenant structures counts among the essential tasks to successfully design safe water retaining reservoirs for hydroelectric power generation, flood retention and irrigation and water supply demands. In view of climate change, especially dams and reservoirs among other water infrastructure will and have to play an even more important role than in the past as part of necessary mitigation and adaptation measures to satisfy vital needs in water supply, renewable energy and food worldwide as expressed in the Sustainable Development Goals of the United Nations. This book deals with the major hydraulic aspects of dam engineering, considering recent developments in research and construction, namely overflow conveyance and dissipations structures of spillways, river diversion facilities during construction, bottom and low level outlets as well as intake structures. Furthermore, the book covers reservoir sedimentation, impulse waves and dambreak waves which are relevant topics in view of sustainable and safe operation of reservoirs. The book is richly illustrated with photographs highlighting the various appurtenant structures of dams addressed in the book chapters as well as figures and diagrams showing important relations among the

governing parameters of a certain phenomenon An extensive literature review along with an updated bibliography complete this book     **Modern Water Control in Irrigation** Hervé L. Plusquellec, Charles Burt, Hans W. Wolter, 1994     For Profit and Prosperity Wim Ravesteijn, Jan Kop, 2008 Roads railway lines and bridges harbours and cities irrigation and drinking water supplies evidence of the presence of Dutch engineers in the former Dutch East Indies may be found everywhere in Indonesia For Profit and Prosperity places this legacy from the colonial past in its true perspective This publication provides a detailed description of some of the most important civil public works projects of the Dutch East Indian era while simultaneously outlining the contribution made by the Netherlands to the restoration modernisation and development of such works in the Republic of Indonesia The public works once constructed by Dutch engineers have greatly influenced the way in which Indonesia has become what it is today For Profit and Prosperity reveals just how all of that happened and it does not merely confine itself to the technological aspect The relevant social economic and cultural developments are also subjected to careful scrutiny This book therefore describes in a unique way just how technology and society can influence each other For Profit and Prosperity does not so much set out to provide a comprehensive catalogue style overview of all the public works structures created in the archipelago but rather to provide an insight into the way in which civil engineering evolved in the former colony At the same time an impression is inevitably given of the effect which all of that had upon Dutch civil engineering in general     **Proceedings of the International Forum on Water Resources Management and Irrigation Modernization in Shanxi Province, China** ,2007     **Design of Hydraulic Gates** Paulo C.F. Erbisti, 2003-01-01 Based on the author s extensive expertise and experience as an engineer of hydromechanical projects this book describes the principal aspects of the design manufacture installation and operation of hydraulic gates Specific topics are analysed in depth such as the selection of the gate type the limits of their use estimating their weight operative forces hoisting systems design of structure and support elements seals and hydrostatic and hydrodynamic forces The use of recent technological advances such as inflatable gates and fusegates is discussed The book can be used as a text book and manual for the design of gates It features a number of worked examples drawings and about 300 photographs to illustrate the concepts and methods involved and covers several different types of gate and their support elements from a variety of applications     CIGR Handbook of Agricultural Engineering: Land and water engineering International Commission of Agricultural Engineering, 1999

*Compte Rendu* ,1987 Vols for 2002 accompanied by CD ROM containing v 2 of the congress and another CD ROM containing the work of the 18th congress     Bibliographie CIID ,1991     Reclamation Era United States. Bureau of Reclamation, 1940     *Flexible Structures* Boris Ivanovich Sergeev, 1986     **Thomas Register of American Manufacturers and Thomas Register Catalog File** ,1955 Vols for 1970 71 includes manufacturers catalogs     Annual Report of the Chief of Engineers on Civil Works Activities United States. Army. Corps of Engineers. Civil Works Directorate, 1969     **Engineering Record, Building Record and Sanitary Engineer** ,1914     The Indian Concrete

Journal ,1955      *ASCE Combined Index* American Society of Civil Engineers,1990 Indexes materials appearing in the Society s Journals Transactions Manuals and reports Special publications and Civil engineering      *The Engineer* ,1954

*Hydraulic Gates and Valves* Jack Lewin,2001 Based on the author s extensive practical experience this new edition will act as a definitive reference work on gates and valves Hydraulic gates and valves in free surface flow and submerged outlets 2nd edition will provide you with a comprehensive overview of the subject and clearly describes the principle options available to engineers and designers and outlines the main advantages and disadvantages of all hydraulic gates and valves highlighting potential problems in their use This fully revised edition includes Information about new types of water operated automatic gates rolling weir gates fuse gates and an extended part on barrier gates and their details The sections on seals the trunnions of radial gates ice formation gate operation and structural design have all been expanded New sections on hazard and reliability of gates earthquake effects on gates and operating machinery environmental impact and aesthetics as well as maintenance An appendix on the calculation of hydrostatic loads on radial gates has been set out Hydraulic gates and valves in free surface flow and submerged outlets 2nd edition will be of great benefit to engineers who work or design project      *The Design of an Automatic Spillway Gate* Lenord Bateman Yarger,1931

## Reviewing **Flap Gate Design For Automatic Upstream Canal Water Level**: Unlocking the Spellbinding Force of Linguistics

In a fast-paced world fueled by information and interconnectivity, the spellbinding force of linguistics has acquired newfound prominence. Its capacity to evoke emotions, stimulate contemplation, and stimulate metamorphosis is truly astonishing. Within the pages of "**Flap Gate Design For Automatic Upstream Canal Water Level**," an enthralling opus penned by a very acclaimed wordsmith, readers set about an immersive expedition to unravel the intricate significance of language and its indelible imprint on our lives. Throughout this assessment, we shall delve in to the book is central motifs, appraise its distinctive narrative style, and gauge its overarching influence on the minds of its readers.

[https://cmsemergencymanual.iom.int/files/scholarship/Download\\_PDFS/Atlas\\_Of\\_Porcelain\\_Restorations.pdf](https://cmsemergencymanual.iom.int/files/scholarship/Download_PDFS/Atlas_Of_Porcelain_Restorations.pdf)

### **Table of Contents Flap Gate Design For Automatic Upstream Canal Water Level**

1. Understanding the eBook Flap Gate Design For Automatic Upstream Canal Water Level
  - The Rise of Digital Reading Flap Gate Design For Automatic Upstream Canal Water Level
  - Advantages of eBooks Over Traditional Books
2. Identifying Flap Gate Design For Automatic Upstream Canal Water Level
  - 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 Flap Gate Design For Automatic Upstream Canal Water Level
  - User-Friendly Interface
4. Exploring eBook Recommendations from Flap Gate Design For Automatic Upstream Canal Water Level
  - Personalized Recommendations
  - Flap Gate Design For Automatic Upstream Canal Water Level User Reviews and Ratings

- Flap Gate Design For Automatic Upstream Canal Water Level and Bestseller Lists
- 5. Accessing Flap Gate Design For Automatic Upstream Canal Water Level Free and Paid eBooks
  - Flap Gate Design For Automatic Upstream Canal Water Level Public Domain eBooks
  - Flap Gate Design For Automatic Upstream Canal Water Level eBook Subscription Services
  - Flap Gate Design For Automatic Upstream Canal Water Level Budget-Friendly Options
- 6. Navigating Flap Gate Design For Automatic Upstream Canal Water Level eBook Formats
  - ePub, PDF, MOBI, and More
  - Flap Gate Design For Automatic Upstream Canal Water Level Compatibility with Devices
  - Flap Gate Design For Automatic Upstream Canal Water Level Enhanced eBook Features
- 7. Enhancing Your Reading Experience
  - Adjustable Fonts and Text Sizes of Flap Gate Design For Automatic Upstream Canal Water Level
  - Highlighting and Note-Taking Flap Gate Design For Automatic Upstream Canal Water Level
  - Interactive Elements Flap Gate Design For Automatic Upstream Canal Water Level
- 8. Staying Engaged with Flap Gate Design For Automatic Upstream Canal Water Level
  - Joining Online Reading Communities
  - Participating in Virtual Book Clubs
  - Following Authors and Publishers Flap Gate Design For Automatic Upstream Canal Water Level
- 9. Balancing eBooks and Physical Books Flap Gate Design For Automatic Upstream Canal Water Level
  - Benefits of a Digital Library
  - Creating a Diverse Reading Collection Flap Gate Design For Automatic Upstream Canal Water Level
- 10. Overcoming Reading Challenges
  - Dealing with Digital Eye Strain
  - Minimizing Distractions
  - Managing Screen Time
- 11. Cultivating a Reading Routine Flap Gate Design For Automatic Upstream Canal Water Level
  - Setting Reading Goals Flap Gate Design For Automatic Upstream Canal Water Level
  - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Flap Gate Design For Automatic Upstream Canal Water Level
  - Fact-Checking eBook Content of Flap Gate Design For Automatic Upstream Canal Water Level
  - 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

### **Flap Gate Design For Automatic Upstream Canal Water Level Introduction**

In today's digital age, the availability of Flap Gate Design For Automatic Upstream Canal Water Level 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 Flap Gate Design For Automatic Upstream Canal Water Level books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Flap Gate Design For Automatic Upstream Canal Water Level 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 Flap Gate Design For Automatic Upstream Canal Water Level 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, Flap Gate Design For Automatic Upstream Canal Water Level 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 you're 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 Flap Gate Design For Automatic Upstream Canal Water Level 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 Flap Gate Design For Automatic Upstream



Canal Water Level 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, Flap Gate Design For Automatic Upstream Canal Water Level 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 Flap Gate Design For Automatic Upstream Canal Water Level books and manuals for download and embark on your journey of knowledge?

### **FAQs About Flap Gate Design For Automatic Upstream Canal Water Level 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 the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Flap Gate Design For Automatic Upstream Canal Water Level is one of the best book in our library for free trial. We provide copy of Flap Gate Design For Automatic Upstream Canal Water Level in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Flap Gate Design For Automatic Upstream Canal Water Level. Where to download Flap Gate Design

For Automatic Upstream Canal Water Level online for free? Are you looking for Flap Gate Design For Automatic Upstream Canal Water Level PDF? This is definitely going to save you time and cash in something you should think about.

### Find Flap Gate Design For Automatic Upstream Canal Water Level :

*atlas of porcelain restorations*

**athletic training prentice 15th edition**

automobile workshop management system pdf wordpress

baensch aquarium atlas

atlas copco ga 132 ff manual

**autohotkey applications ideas and tips for writing practical autohotkey scripts updated 2 27 15 intermediate techniques using the powerful tools built apps autohotkey tips and tricks book 3**

~~atlas de bolsillo de cortes anatomicos tomografia computarizada y resonancia magnetica espina dorsal extremidades y articulaciones ct and mri spine extremities and joints spanish edition~~

**ave maria song from keyboard ez 200 download**

**asme ansi b16 standards for pipes and fittings**

*astm a 90 nhml material testing services*

*back in black the drum ninja*

*asis cpp study guide rebird*

atonement ian mcewan

**auditing assurance services 15th edition answers**

autumn in the heavenly kingdom china the west and the epic story of the taiping civil war i 1 2 i 1 2 hardcover i 1 2 i 1 2

### Flap Gate Design For Automatic Upstream Canal Water Level :

Service Manual for CBR500R - Honda Rebel 3 Forum Nov 24, 2017 — Hi, I have recently found a service manual for CBR500R. As far as I know our Rebel 500 has the same / similar engine. CBR500 Service Manual FREE download Mar 16, 2017 — Hi, I bought and downloaded a PDF version of the Honda 2013-2016 CBR500 Service Manual and offer it for free download: HONDA CBR500R MANUAL Pdf Download Motorcycle Honda CBR600F4i Series Service Manual. (492 pages). Summary of Contents for Honda CBR500R. Page 1 ... 2022-2023 CB500FA/XA CBR500RA Service Manual Honda Genuine Service Manuals lead the industry with clear, comprehensive presentation of motorcycle service and repair procedures. Each

Service Manual is ... 2020 CBR500R/RA Owner's Manual Honda Service Manual to help you perform many maintenance and repair ... 2020 CBR500R/RA Owner's Manual. Authorized Manuals. USA The Service Manual used by your. User manual Honda CBR500R (2022) (English - 145 pages) Manual. View the manual for the Honda CBR500R (2022) here, for free. This manual comes under the category motorcycles and has been rated by 1 people with an ... Honda CBR500R Online Motorcycle Service Manual Service your Honda CBR250R motorcycle with a Cyclepedia service manual. Get color photographs, wiring diagrams, specifications and step-by-step procedures. User manual Honda CBR500R (2016) (English - 137 pages) Manual. View the manual for the Honda CBR500R (2016) here, for free. This manual comes under the category motorcycles and has been rated by 4 people with an ... Honda CBR500R Service Manual eBook : Cyclepedia ... The Cyclepedia.com Honda CBR500R online service manual features detailed full-color photographs, complete specifications with step-by-step procedures ... 2016 CBR500R Owners Manual : r/cbr Hi guys, I'm wondering if anyone has a link to the 2016 CBR500R owners manual pdf or knows where I can get a physical copy. Appreciate the help! Peugeot XR6 / MotorHispania Racing RX Service Repair ... Peugeot XR6 / MotorHispania Racing RX Service Repair Manual MANUALMADNESS.com - Free download as PDF File (.pdf), Text File (.txt) or read online for free. Peugeot XR6 MotorHispania Racing RX Service Repair ... Peugeot XR6 MotorHispania Racing RX Service Repair Manual MANUALMADNESS Com PDF. Uploaded by. Sanyika Nagy. 0 ratings0% found this document useful (0 votes). Peugeot XR6 Workshop Service & Repair Manual ... Peugeot XR6 Workshop Service & Repair Manual # 1 Download. Peugeot XR6 Workshop Service & Repair Manual With this in-depth & highly detailed manual you will ... Peugeot XR6 Motorcycle Full Service & Repair Manual Complete Factory Service Repair Workshop Manual. No Extra fees, No Expiry dates. Service Repair Workshop Manual, available for instant to your computer ... Peugeot Motorcycles XR6 Workshop Manual View and Download Peugeot Motorcycles XR6 workshop manual online. XR6 motorcycle pdf manual download. FORD BA Falcon XR6, XR8 Factory Workshop Manual FORD BA Falcon XR6, Falcon XR6 Turbo and Falcon XR8 2003-2005 Factory Workshop Manual. Comes as a PDF download. Covers the following engines 4.0L 6 Cylinder ... Ford Falcon Workshop Manual 2002 - 2005 BA Free ... Download a free pdf Ford Falcon workshop manual / factory service manual / repair manual for cars built between 2002 - 2005. Suit BA series vehicles. FORD EB Falcon XR6 and XR8 Workshop Manual FORD EB Falcon XR6 and XR8 1991-1993 Comprehensive Workshop Manual | PDF Download. This Ford Workshop Manual is suitable for the following Ford models ... Ford Falcon FG Workshop Manual / Factory Service Manual Factory workshop manual / repair manual for the 2008 to 2014 series FG Ford Falcon. Covers all topics such as servicing, maintenance, general repairs, advanced ... Audi Online Owner's Manual Audi Online Owner's Manual. The Audi Online Owner's Manual features Owner's, Radio and Navigation ... Audi allroad quattro Quick reference guide Apr 12, 2017 — The aim of this quick reference guide is to introduce you to the main features and controls of your vehicle. This quick reference guide cannot replace the ... 03 2003 Audi Allroad Quattro owners manual 03 2003 Audi Allroad

Quattro owners manual ; Item Number. 373972378996 ; Modified Item. No ; Year of Publication. 2003 ; Accurate description. 5.0 ; Reasonable ... 2003 Audi Allroad Quattro Owner's Manual 2003 Audi Allroad Quattro Owner's Manual. \$188.69. Original factory manual used as a guide to operate your vehicle. ... Please call us toll free 866-586-0949 to ... 2003 Audi Allroad Quattro Owners Manual Find many great new & used options and get the best deals for 2003 Audi Allroad Quattro Owners Manual at the best online prices at eBay! Audi Allroad 2.7T C5 2000 - 2004 Owner's Manual Download and view your free PDF file of the Audi Allroad 2.7T C5 2000 - 2004 owner manual on our comprehensive online database of automotive owners manuals. Audi Allroad Quattro Quick Reference Manual View and Download Audi Allroad Quattro quick reference manual online. Allroad Quattro automobile pdf manual download. Audi A6 Owner's Manual: 2003 Bentley Publishers offers original factory produced Owner's Manuals for Audi. These are the factory glovebox manuals containing everything from technical ... 2003 AUDI ALLROAD QUATTRO OWNERS MANUAL ... Type: Allroad Quattro (C5); Printnumber: 241.561.4BH.32; Pages: 372; Measures: DIN A5; Country: Germany; Language: Dutch; Year: 05.2003; Comments: 2.7 | 4.1 ... 2003 Audi Allroad Quattro Owner's Manual Set Original factory manual set used as a guide to operate your vehicle. Complete set includes owner's manual, supplements and case. Condition: Used