

OEXX[®]



2018

AUTOMOTIVE AIR CONDITIONING INDUSTRY TRAINING

ashdown
Ingram

APPCO™

autostop
Auto Air Service

CAPRICORN
PREMIER SUPPLIER

DENSO

extreme
automotive parts distributors

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MAINTENANCE

Refrigerant Lichuan
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Repco

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SULCO
TOOLS & EQUIPMENT

VASA

Conducted by Grant Hand - Australasia's leading automotive trainer

BASIC COURSE

FUNDAMENTALS OF AUTOMOTIVE AIR CONDITIONING

COURSE OUTLINE

This is a crucial course for all automotive technicians; whether you are new to the industry, or just haven't had the opportunity to undertake comprehensive system pressure / temperature diagnostic training before. With the large variation of systems currently on the market, gauge recognition alone can no longer be relied upon to analyze charge rates, or perform system diagnostics.

DURATION = 8 hours (1 Day)

CONTENT

- Componentry and system layout
- Full pressure and temperature analysis of the system
- Reading and analyzing gauges correctly (both pressure and temperature)
- Basic fault diagnosis of systems
- Full servicing procedures
- Servicing equipment, recommendations and guidelines
- Critical charging of systems (when the charge quantity is not known)
- Analyzing charge rates by pressure / temperature analysis and pipe feel
- Overviews of system types – TX valve, expansion tube, variable pumps and full electronic clutchless systems
- Full training manuals are provided with this course
- 1234yf systems

ADVANCED DIAGNOSTIC COURSE

ANALYSIS OF AUTOMOTIVE AIR CONDITIONING SYSTEMS

COURSE OUTLINE

This course is an extension of the basic fundamentals course. It covers full diagnostic techniques for all automotive and air conditioning systems currently fitted to road vehicles.

This is an essential course for anybody involved in the service and repair of automotive air conditioning systems. Comprehensive diagnostic manuals are provided which will specifically address TX valve, expansion (orifice) tube systems and variable displacement compressors. This course also utilises a considerable amount of supervised practical and group work.

DURATION = 8 hours (1 Day)

CONTENT

- A review of pressure and temperature analysis of systems
- Detailed operation of the cycling clutch thermostatic expansion valve system
- Detailed operation of the expansion / orifice tube systems (there are three variations of the basic system)
- Detailed operation of mechanical variable displacement compressor systems
- Full diagnosis of all three systems including system (component) faults, charge analysis and performance analysis
- Special attention is given to the correct analysis of variable displacement compressor failures (a large number of compressors are replaced unnecessarily due to other system faults)
- 1234yf systems



EARTHMOVING & AGRICULTURAL **AIR CONDITIONING SYSTEMS**

COURSE OUTLINE

This course is dedicated to the diagnosis and evaluation of mobile air-conditioning systems that are used in off-road applications. These systems are in many cases different from 'ordinary' automotive systems, as they can often suffer from pressure drops, flow restrictions, incorrect pipe sizing and / or poor design, that limit the capacity especially in high humidity conditions. In this course we specifically address diagnostic procedures, pressure / temperature analysis, performance evaluation, capacity and efficiency analysis.

You may have systems that lack performance, or that suffer from low capacity that you cannot repair without a component replacement / modification.

DURATION = 8 hours (1 Day)

CONTENT

- A review of pressure / temperature analysis of systems
- Capacity, efficiency, performance evaluation and diagnosis
- Flow analysis, pressure drop analysis, hose sizing
- Gauge analysis to identify excessive pressure drops, incorrect hose size etc
- Data logging of performance
- Correct pump sizing
- TX valve sizing, superheat and correct system matching
- Identifying condenser limitations, correct sizing, sub-cool and pressure analysis
- Identifying evaporator limitations, blockages, and flow analysis

OEX[®]

NORTH ISLAND

Waipuna Hotel & Conference Centre

58 Waipuna Road, Mt Wellington - Auckland

www.waipunahotel.co.nz

Ph (09) 526 3000

Dates/Courses



Fundamentals of Automotive Air Conditioning	Fri 10 th August
Fundamentals of Automotive Air Conditioning	Sat 11 th August
Analysis of Automotive Air Conditioning Systems	Sun 12 th August
Earthmoving & Agricultural Air Conditioning Systems	Mon 13 th August

Registration From 7:30am **Courses Start** 8:00am **Finish** 5:00pm

SOUTH ISLAND


SUDIMA CHRISTCHURCH AIRPORT

550 Memorial Avenue, Christchurch

www.sudimahotels.com/locations/christchurch-airport/

Ph (03) 358 3139

Dates/Courses



Fundamentals of Automotive Air Conditioning	Fri 17 th August
Analysis of Automotive Air Conditioning Systems	Sat 18 th August
Earthmoving & Agricultural Air Conditioning Systems	Sun 19 th August

Registration From 7:30am **Courses Start** 8:00am **Finish** 5:00pm

For more details please contact *Paul Findlater* on (09) 573 0680.

Alternatively, for course bookings free call 0800 445 889 or fax the attached Attendance/Remittance form to 0800 820 012 or email Auckland@ashdown-ingram.co.nz

Air Conditioning Training 2018

Attendance/Remittance



NORTH ISLAND (Waipuna Hotel Conference Centre)

- I wish to attend the **Fundamentals of Automotive Air Conditioning** course
 Friday 10th August \$450.00 + GST
- I wish to attend the **Fundamentals of Automotive Air Conditioning** course
 Saturday 11th August \$450.00 + GST
- I wish to attend the **Analysis of Automotive Air Conditioning Systems** course
 Sunday 12th August..... \$450.00 + GST
- I wish to attend the **Earthmoving and Agricultural Air Conditioning Systems** course
 Monday 13th August \$450.00 + GST

SOUTH ISLAND (Sudima Christchurch Airport)

- I wish to attend the **Fundamentals of Automotive Air Conditioning** course
 Friday 17th August \$450.00 + GST
- I wish to attend the **Analysis of Automotive Air Conditioning Systems** course
 Saturday 18th August..... \$450.00 + GST
- I wish to attend the **Earthmoving and Agricultural Air Conditioning Systems** course
 Sunday 19th August..... \$450.00 + GST

Account charge	Branch	Order Number
<input type="checkbox"/> Ashdown-Ingram
<input type="checkbox"/> Appco
<input type="checkbox"/> Repco
<input type="checkbox"/> Autostop
<input type="checkbox"/> Extreme
<input type="checkbox"/> Sulco
Credit Card		Expiry Date
<input type="text"/>		<input type="text"/>
Attendee Name		Ph No:
Attendee Name		Ph No:
Company Name		Ph No:
Email		
Address		

- Registration opens at 7.30am and courses run from 8am to 5pm.
- Morning tea, lunch, and afternoon tea are supplied.
- Please note that, as advanced bookings on facilities and catering are required, no refunds can be made 10 business days prior to the course.
- Cheques must be received 10 business days prior to course date.

For more details please contact Paul Findlater on (09) 573 0680.
Alternatively, for course bookings free call 0800 445 889 or fax this form to 0800 820 012 or email Auckland@ashdown-ingram.co.nz