

CHAPTER 8

Workplace communications

- Objectives of communication
- Benefits of good communication
- Who do we communicate with?
- Verbal communication
- Non-verbal communication
- Barriers to good communication
- Sources of information
- Workplace documents
- Technical terms
- Review questions



This chapter is aimed at helping the automotive technician to understand the processes and benefits of good workplace communications.

Good communication is the lifeblood of any successful business. Communication can be defined as the exchange of ideas or information and the sharing of feelings. This definition implies a two-way process. Putting a notice on the workshop noticeboard is not considered communication. It is simply providing information rather than an exchange of information.

There is always a *sender*, a *receiver* and *feedback* in the communication process. The role of sender or receiver is not fixed and will change continually during a normal conversation.

Objectives of communication

Information must reach the receiver at the right time, in the right format and in language that can be understood by the receiver.

Whether a business is large or small, the objectives will remain the same, although the communication tools may vary.

Benefits of good communication

Everyone benefits from good communications in the workplace. A more productive and safer environment is the main outcome of good communication. Other benefits include:

- a healthy and happy workforce
- improved customer relations
- good relationships with co-workers and supervisors
- a stable industrial relations environment.

Poor communication will usually have the opposite outcome. Productivity may drop and relationships between management and employees may become strained. High absenteeism and staff turnover are two signs of poor communication.

Who do we communicate with?

The diagram in Figure 8.1 shows the people a technician may come in contact with on a normal day at work. This diagram represents a medium-size workshop and will vary at each workplace depending on the size.

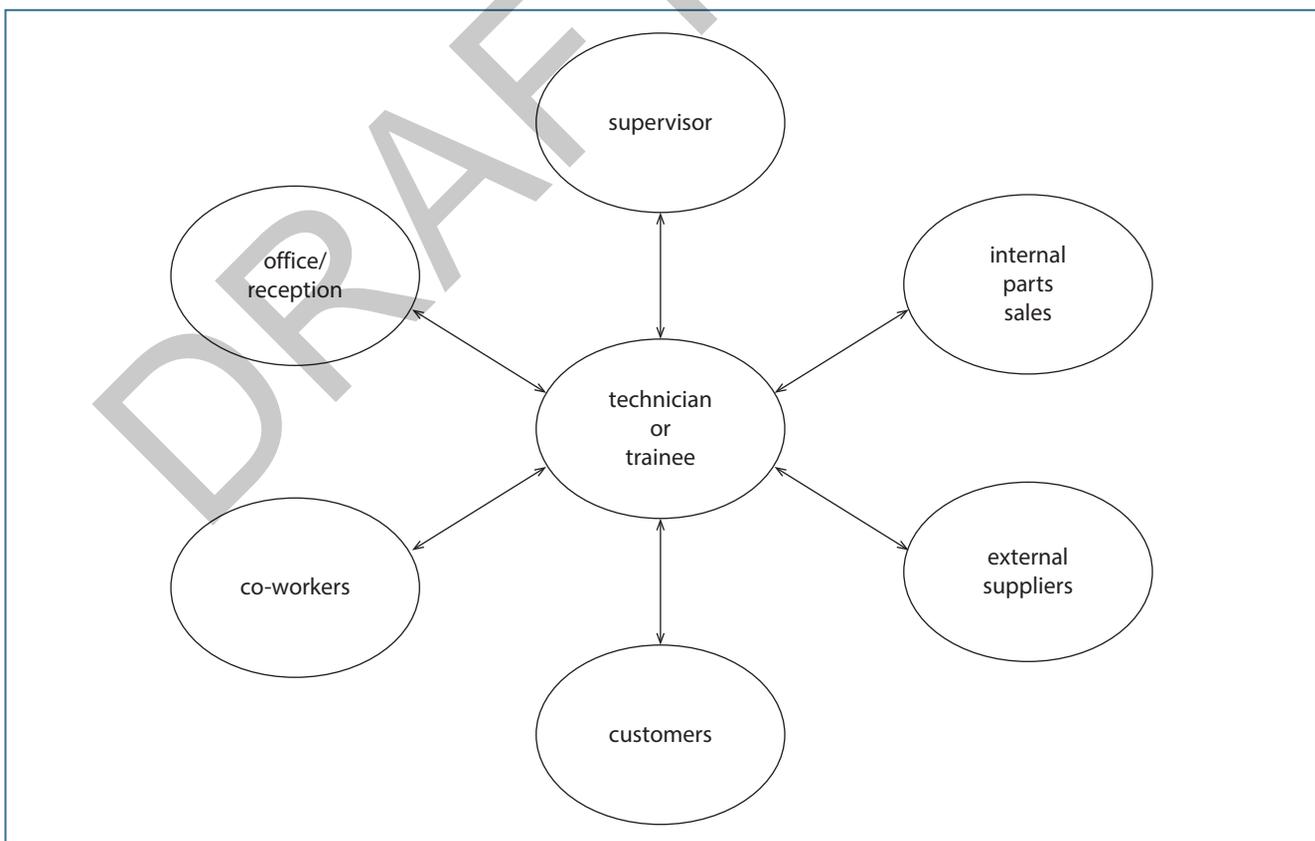


Figure 8.1 Communication diagram for a medium-size automotive workshop

The way we communicate with each person will be different. It is important to consider *who* and *how* we communicate with each person. For example, the best way to explain a technical problem to a fellow worker will be different from the way to explain the same problem to a customer who has no technical background.

Communication can be divided into two main types: *verbal* or *spoken communication* and *non-verbal communication*.

Verbal communication



Verbal communication can be face to face with an individual or groups, over the telephone or by video link. Verbal communication is the most effective way to communicate information and ideas. It is also the communication channel that can cause the most problems.

Questioning skills

There are many types of questions that can be used for different situations. A question can be used as a greeting – ‘How are you?’ – or to start a conversation – ‘How is the rain affecting you?’ – but the most common use of questions in the workplace is to gain information.



Reminder: You get the right answers when you ask the right questions.

There are basically two main types of questions used to gain information: *closed questions* and *open questions*.

Closed questions

These are used when a limited answer is required, for instance, ‘Was the engine hot or cold when the warning light came on?’ They are used to keep the conversation focused on the topic and can gain a lot of information quickly.

Open questions

Open questions allow a longer and more detailed response. ‘What do you think of the new engine analyser?’ will get a different answer from ‘Do you think the new engine analyser is easier to use than the old one?’ The first question allows more information to be communicated than the second question, which requires only a yes or no answer.

The careful use of questions is very important in customer relations. Figure 8.2 shows a service manager questioning a customer about her car. It can build a bond, so that the customer has confidence in the



Figure 8.2 Service manager questioning a customer about her car

repairer – but avoid asking too many questions. The conversation can turn into an interrogation and turn the customer off.

Using the telephone

A telephone call is often the first contact a person will have with the workplace. Every caller should be treated as a potential customer, so it is important to make a good impression.

Many workplaces have a set procedure to follow when answering the phone. Figure 8.3 shows a phone call being logged on the computer. If a set procedure is not provided, the following simple procedure could be used:

- Begin with a greeting: ‘Good morning/afternoon’.
- Provide the business name: ‘This is XYZ Workshop’.
- Give your first name.
- Request the person’s name.
- Ask: ‘How can I help you?’



Figure 8.3 A telephone inquiry being logged directly onto the computer

When using the telephone always:

- Speak clearly.
- Use a polite and friendly tone of voice.
- Write down and repeat important information.
- Record the time of the call.
- Let the caller know you are listening by saying 'yes I have got that' or 'I understand' occasionally.
- If you cannot answer the inquiry, make sure it is followed up.
- Inform the caller what will happen next.
- Let the caller hang up first.

Non-verbal communication



Non-verbal communication is any form of communication that does not use speech. It is just as important as verbal communication. One form of non-verbal communication is often referred to as *body language*. It includes such things as:

- facial expressions
- eye movement
- personal grooming and clothing
- hand movements and gestures
- how and where a person stands in relation to the other person.

Body language is usually instinctive, which means the person is not aware that he or she is doing it. Feelings such as boredom, aggression, frustration, attentiveness and relaxation can all be relayed through body language. A good communicator will be in tune with the other person's body language and his or her own.

If the body language during a conversation is negative – for example, folded arms and a bored look on the face of the listener – the speaker should change the conversation to include the listener. Asking questions is a good start to re-engage the listener.

Non-verbal communication such as using hand signals is often useful in a noisy environment. Figure 8.4 shows a car being guided onto a hoist. The driver cannot



Figure 8.4 Guiding a car onto a hoist

hear the person guiding, so hand signals are the best method of communication.

Listening skills

Active listening is a technique in which the listener provides feedback to the speaker. The feedback can be verbal – 'I understand' – or non-verbal – nodding of the head to show the speaker that you are listening. Active listening is a skill that can be practised and developed by using some or all of the following techniques:

- Maintain eye contact with the speaker when possible.
- Take written notes of important points.
- Don't be distracted.
- Ask questions to clarify anything that is not fully understood.
- Summarise the main points when the speaker has finished.



Reminder: A good listener is an active listener.

Email

Email is almost universal as a tool for communication in the workplace. There are many advantages to using email over other forms of communication:

- The message is transmitted almost instantaneously to the receiver.
- Attachments such as reports or quotes can be included.
- The receiver can respond to the email when it best suits him or her.
- Keeping copies can be done electronically, saving paper and space.

Disadvantages include:

- Unwanted mail that has to be dealt with, causing wasted time.
- Excessive mail build-up if not regularly answered.

Tips for safe and effective use of email include:

- Open email from a trusted source only.
- Don't open attachments immediately. Use spyware software to check attachments before opening
- Don't use a work computer for private email.
- Always log out when you are finished.

Barriers to good communication



Communication breaks down when it is obvious the message is not getting through to the right person at the right time. Some of the more common barriers to good communication are listed here:

- Use of the wrong communication channels, for example, the use of an email when a phone call would be quicker.
- Not clarifying or checking the main points.
- Use of inappropriate language, for instance, including terms that are too technical for the customer to understand.
- Poor body language, sending mixed signals to the receiver.
- Not listening or being distracted during a conversation.

Identifying why communication has broken down is essential to resolving the problem.

Writing skills

Writing in the workplace is usually limited to reports, memos and service recording documents. Writing must be neat and readable. Keep sentences as short as possible.

Use correct technical terms, for example, 'The shock absorbers require replacement' – not 'The shockies have had it'. A verbal explanation can be given to the customer later if required. The correct terms become more important if there is a dispute over repairs.

Keep copies of all reports or any written information given to the customer.



Reference: A glossary of common automotive terms and their meanings is available in the back of Volumes 1 and 2.

Reading skills

The purpose of reading in the workplace is to find and use information. Reading skills required may vary from quickly skimming or scanning a document to gain a general idea to reading a procedure in detail to make sure you fully understand the material.

Sources of information



Technicians need to be able to access a variety of information in order to diagnose and repair faults on vehicles. The information can be found in various formats and locations, such as books and magazines, on electronic compact discs (CDs), websites and on the vehicle in the form of decals.

The most common sources of information are:

- workshop manuals
- vehicle owner's handbook
- service and tune-up guides
- standard times guides
- product guides
- on the vehicle
- the internet.

Workshop manuals

Vehicle manufacturers publish workshop manuals for their vehicles. In some instances, technical information is also available on CDs. As well as this, an *owner's manual* is supplied with each new vehicle.

Workshop manuals are divided into a number of sections, each covering a major part of the vehicle. There are procedures for major and minor repairs as well as information on maintenance, adjustments, fault diagnosis and specifications.

Manuals are often divided into a number of volumes, with separate volumes for the engine, transmission, body and so on. An automotive mechanic must be able to refer to workshop manuals and interpret the information that they contain.

Workshop manuals have a contents page at the front of the book and a contents list at the start of each section. These should be the starting point when looking for information.



Handy hint: Workshop manuals are also known as *service manuals* or *repair manuals*. Many are available on CD or online.

Technical information

The following types of technical information can be found in workshop manuals:

- 1 *Descriptions.* The features and construction of a component or a system are often described at the start of a section as a means of introducing a component.
- 2 *Principles of operation.* The principles of operation of various components and systems are described – it is necessary to know how things function before they can be properly serviced, particularly when diagnosing problems.
- 3 *Maintenance and service.* These are procedures that should be carried out at regular intervals to maintain the vehicle in a sound condition.
- 4 *Service adjustments.* Manuals include descriptions of how adjustments are carried out and when they should be done.
- 5 *Tune-up procedures.* These are the services that should be done periodically to maintain engine efficiency.
- 6 *Repair operations.* These are the detailed descriptions and illustrations of both major and minor repairs. They include methods of dismantling, repairing, installing and adjusting the various components and systems.
- 7 *Special tools and equipment.* Information is provided on special tools and equipment needed to service the particular model of vehicle.

- 8 **Technical data.** This is important information that includes specifications, torque settings, capacities (fuel, oil and coolant), sizes, wear limits, clearances and other information that is needed during servicing or repairs.
- 9 **Wiring diagrams.** These show the electrical wiring for the various parts of the vehicle. They include the colour code for the wires and the connections to all the electrical components.

Technical illustrations

Illustrations are used in workshop manuals to support the text and the same types of illustrations are used in this book. There are a number of different types of illustrations.

- 1 **Line drawings.** These show only one view of an object and so have only two dimensions – width and height, depth and height, or depth and width.
- 2 **Pictorial drawings.** These have three dimensions – width, height and depth. They show the full shape of the object.
- 3 **Photographic illustrations.** These are photographs of the actual object.
- 4 **Exploded views.** This type of illustration is used to show the parts of a component that has been dismantled. The parts are laid out in the correct order for reassembly.
- 5 **Sectional views.** These have a section of the object cut away to show the internal parts. Cross-hatched lines drawn across the housing show where it has been cut.
- 6 **Schematic drawings.** These are simplified drawings in which parts are not drawn to their true shape. Instead, outlines of the parts are drawn, or the parts are represented by symbols. Wiring diagrams are of this type.
- 7 **Block diagrams.** Block diagrams are used to show the relationship of parts of a system. The actual parts are not drawn to shape, but rectangles (blocks) are used to represent the parts (Figure 8.5 is an example).

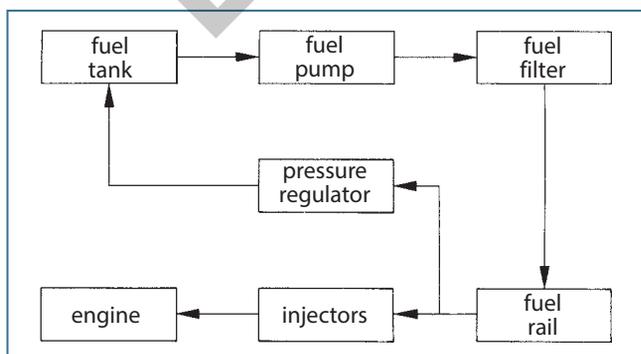


Figure 8.5 A block diagram that shows the flow of fuel in the fuel system

Tables and charts

Tables and charts are used to show specifications, pressures, thread sizes or other data. They provide information in a form for easy reference.

Some charts are known as tree charts because they have branches that lead from one item to another. A chart used for diagnosing problems is shown in Figure 8.6. This shows a logical sequence to follow when trying to solve a problem.

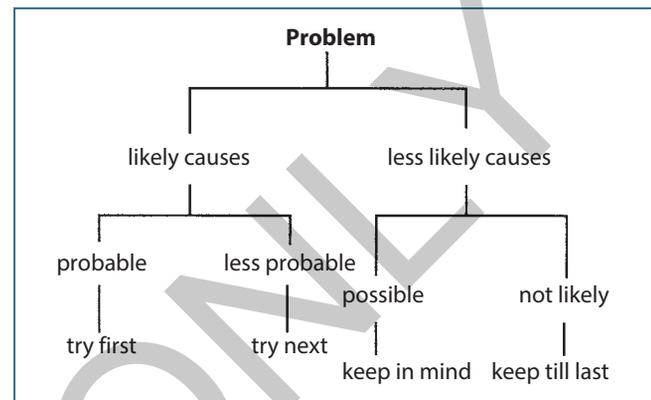


Figure 8.6 The tree chart shows a path to follow when diagnosing a problem



Reference: More information on diagnosis and troubleshooting can be found in Chapter 32, Basic mechanic and diagnosis.

Vehicle owner's handbook

Details of the location and correct operation of the vehicle's controls are found in the owner's handbook. The meaning of symbols on the instrument cluster, operation of switches, and adjustment of seats and steering position are just some of the elements that can be found in the handbook. Emergency, safety and vehicle care information are also included in handbooks.

Service and tune-up guides

These publications provide information on routine servicing for the general repair workshop. They include topics such as service intervals, fluid and lubricant types, locations and quantities. They also include specifications for the engine, fuel and electrical systems.

Vehicles are listed in alphabetical order, with the most common locally produced and imported vehicles represented. Electronic versions are available, with additional information including pictures of components and test procedures.

These guides are designed for the technician who is experienced in service and repair procedures. They are not designed to replace vehicle workshop manuals.

Standard times guides

A standard times guide provides a list of the common repairs, services and adjustments for a range of vehicles and the expected time needed to carry out the task. The time is stated in hours or parts of hours; 2.5 hours equals 2 hours 30 minutes.

Vehicles are listed in alphabetical order and the tasks arranged in sections such as engine, transmission, brakes etc.

These publications are useful when quoting the cost of repairs to customers. They are only a guide, however, because they don't take into account problems that may occur when repairing older vehicles.

Product guides

Manufacturers provide guides on the products they produce and the vehicles on which they are used. Filters, lubricants, spark plugs and timing belts are just some examples of products with accompanying guides that can be found in most workshops. They are normally supplied free of charge on request from the parts suppliers or are available on their website.

On the vehicle

All vehicles must be supplied with information on tyre size and recommended pressures, exhaust emissions and engine adjustments. The information is normally provided on decals or 'stickers' that are stuck onto the vehicle in various locations. Other decals can be found that provide information on air-conditioning refrigerants and timing belt replacement. Figure 8.7 shows typical locations of plates and decals.

Internet

The internet is a popular source of information. All vehicle manufacturers, product suppliers, and tool and

equipment manufacturers have websites that provide information about their products and services. If the website address is not known, it can usually be found by searching the name of the product.

Vehicle identification

Manuals contain general information about the vehicle, including vehicle model identification. All vehicles are fitted with a *compliance plate* and a *data plate*. These metal plates are fixed to a body panel in the engine compartment and must never be removed.

Compliance plate

A compliance plate (Figure 8.8(a)) shows the make, model and the vehicle identification number (VIN). It also states that the vehicle was built to comply with the *Motor Vehicle Standards Act*.

Vehicles must conform to Australian Design Rules, which cover safety, emission control and consumer protection. All vehicles are built to these standards and must carry a compliance plate.

Data plate

A data plate (Figure 8.8(b)) contains the manufacturer's information about the vehicle, such as the model, body type, trim, colour code, suspension and transmission type. These are shown as codes consisting of letters and numbers. The date the vehicle was built is also shown. This is the date that the vehicle was driven from the production line.



Handy hint: Data from the data plate is used to identify the vehicle and components when obtaining replacement parts.

Manuals explain this data and also show where to find the body number, the engine number and the

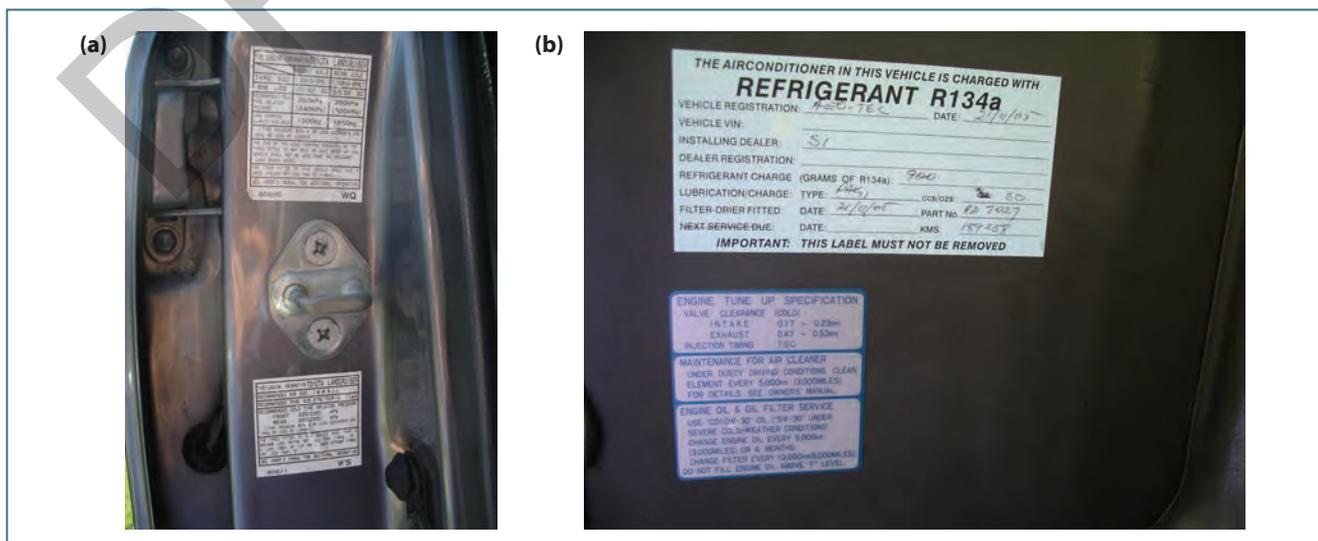


Figure 8.7 (a) Tyre information located on the driver's door pillar (b) refrigerant and service information located under the bonnet

(a) Compliance plate

(b) Data plate

Figure 8.8 Compliance plates and data plates are fitted to every vehicle

transmission number. Serial numbers stamped on these parts are used for identification purposes.

Workplace documents

All important information in the workplace needs to be documented and filed. Documents may need to be kept for up to seven years for taxation or warranty purposes. Most workplace documents are in a fixed format or a *form*.

The following forms are commonly used in automotive workshops for the service and repair of vehicles.

Quote

A quote is a statement of the proposed cost of repairs provided to the customer by the repairer. It would normally include the cost of parts, labour and any consumables such as oil, rags etc. If the quote is accepted and signed by the customer and the repairer, it is legally binding on both parties.

Repair order/job card

The repair order (RO) records all of the essential information relating to the repair, which is needed to invoice the customer. This information would include:

- business name and details
- reference number and date
- customer's name and contact details
- vehicle details including registration and VIN
- odometer reading and fuel level
- description of the job to be carried out
- extra work required
- parts and labour used
- discounts and promotions.

The repair order and job card can be combined into one document or may be separate depending on the needs of the workshop.

It is essential that the customer signs and authorises all repairs on the repair order.

Invoice

An invoice is a request for payment for the goods or services provided by the repairer. The invoice details the repairs and materials used. It also states the method and terms of payment. For example, 'A discount of 5% will apply if the account is paid in cash when collecting the vehicle' or 'Payment is due within 30 days'.

Receipt

A receipt is a record of payment. The receipt can be handwritten or generated electronically. Often the invoice is stamped 'PAID' when payment is made. The stamped, dated and signed invoice then becomes the receipt.



Reminder: All documents must comply with Goods and Services Tax (GST) requirements.

Warranty tags

When a faulty component is replaced while it is still under the manufacturer's warranty, a warranty tag is attached to the component. Each manufacturer has its own warranty tags and procedures. A car may also have a number of separate warranties that apply. If a tyre has a defect, for example, the tyre manufacturer will be responsible rather than the car manufacturer.

It is important that all of the information regarding the faulty component is recorded on the repair order and the warranty tag, or the claim may be rejected.

Technical terms

Clarify, summarise, open and closed questions, compliance plate, data plate, decal, exploded view, sectional view, pictorial view, quote, repair order/job card, invoice, receipt, consumables, warranty tag.

Review questions

1. Define the term *communication*.
2. State the two main types of communication.
3. List the people that would normally communicate in the workplace.
4. State six benefits of good workplace communication.
5. What are three reasons for asking questions?
6. Give an example of a closed question.
7. Give an example of an open question.
8. List five steps when answering a telephone call.
9. What is active listening?
10. List five types of information that would be found in a workshop manual.
11. In this textbook, find an example of the following: a line drawing, a circuit diagram, a pictorial view, a sectional view and an exploded view.
12. What is a compliance plate, and where is it likely to be located?
13. What type of information is a data plate likely to contain?
14. State five barriers to good communication.
15. What is a quote?
16. List nine items of information that should be listed on a repair order.
17. What is an invoice?
18. When is a warranty tag used?