

**WATER SAVING
SOLUTIONS**



Proudly manufactured in Australia

DOUST

DOUST PLUMBING PRODUCTS



Technical
and product
catalogue

About Doust Plumbing Products



Proudly Australian made

The DoustValve™ and Doust Plumbing Products' range of quality innovative products are a result of over thirty years experience in the plumbing industry and observations of what actually works. The Doustvalve was released in 1998, in a competitive market largely dominated by imports. Designed by Master Plumber, Philip Doust who commenced his apprenticeship at the age of sixteen in Perth, Western Australia. The tremendous success achieved in the marketplace has been due to the belief that you the consumer are really the only person who controls the retail marketplace. We have also received support from many fine retailers and their staff. This booklet is designed to pass onto the tradesperson, sales persons and consumers solutions that they may not be aware of. In the average home's water service there are many variables, high, or low water pressures, loose pipework, faulty non-return valves (hot water unit) and excessively high temperatures with some

hot water units and of course faulty or damaged tap bodies. These are amongst the many reasons some homeowners experience difficulties that they find extremely hard to overcome, as many tradespeople are well aware. Some of these problems are unique to Australia where experience or local knowledge can in many instances be the only solution. The aim of Doust Plumbing Products is to manufacture high quality products 100% in Australia to suit our conditions. Whilst we are always working to achieve this, our pledge is that if this is not possible, we will obtain the highest quality imported components. We believe and our experience proves, that you the customer are willing to support high quality Australian made products and we thank you for our continuing success. We hope this booklet proves to be a valuable service tool for you in understanding and overcoming problems in your domestic mains pressure water service.



This catalogue is a guide to the professional servicing of tapware. The servicing for specific tapware ranges must be undertaken as per the manufacturers requirements. All servicing must be by a Qualified Plumber/Tradesman in accordance with local by-laws. In carrying out plumbing work, many hazards exist and while great care has been exercised in compiling this guide, the makers

specifically disclaim any liability whatsoever from all causes of action at law by the user, to the user or any other person which may arise from or be incidental to the use of this guide. The copyright in this book is protected and all users are warned that reproducing it in any form may expose the user to both penalties and damages.

Four easy steps for fixing dripping taps

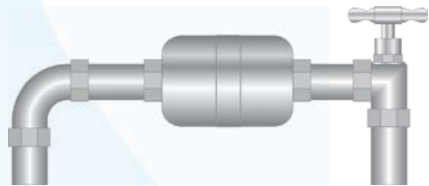
Servicing recommendations for authorised tradespersons to assist in fixing and understanding common problems such as dripping taps, hard to turn off taps, water hammer and noises in water services.

Please read through this booklet before commencing any service work.

Step 1

Turn off the water main

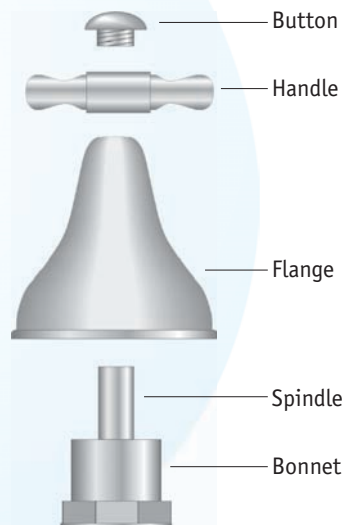
The water meter is usually located near the property boundry, turn the stop tap in a clockwise direction and firmly close. Then turn the closest tap to the ground level fully on, this will release the pressure and allow water to escape.



Step 2

Removing tap components

Remove the tap handles first. There are many configurations and some may require special tools such as allen keys. If you are in any doubt refer to the manufacturer for detailed instructions. Most tap handles can be removed in an easy manner as many have spring loaded flanges. However with some of the older screwed tapware flanges they may be far more difficult. Always use extreme care when removing these types of tap ware components, especially when they are fitted in viterous china fixtures such as basins. It is necessary to brace the tap under the fixture for the excessive torque required in removing the components.

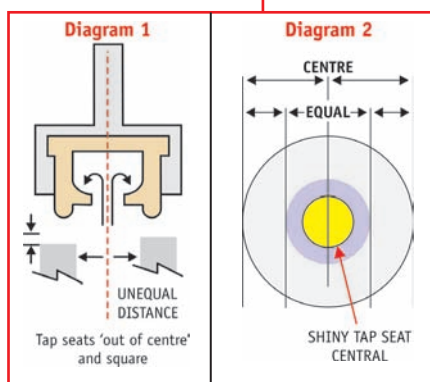
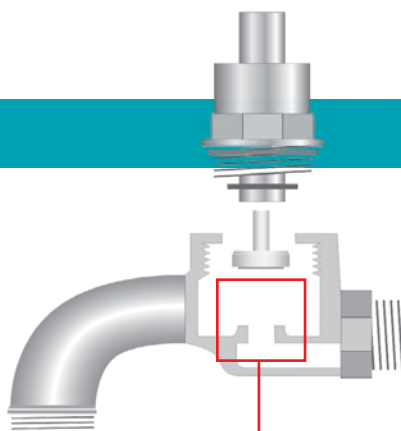


Problem taps

Step 3

Servicing tap components

Once the bonnet and spindle are removed, the spindle should be removed from the bonnet. If it is jammed do not apply force. This will usually break the spindle, it is better to apply heat with a naked flame. Of course the "O" ring will burn, however you have to replace it in any event. Exercise care removing the spindle from the bonnet while hot and allow to cool by itself. Now clean the spindle and the internals of the bonnet with the DustClean™ tap cleaner. If a particular tap has a hard/easy turn on and off feel, then this is usually the result of a bent spindle. Roll the spindle along a flat surface, if it is not true replace it. After cleaning fit new "O" rings with a liberal amount of DustGrease™. Re-assemble leaving the tap in the fully "turned on" position. Give the tap seat a gentle re-surface with the tap-reseater as supplied in the DustKit™. You should see a light continuous shine in a complete circle. View the tap body from directly above.



If this new shiny circle is complete and in the centre, (use a flashlight if difficult to see) then fit your new DustValve™ complete with the bonnet and spindle. New body washers are supplied in the DustGrease™ pack and they should also be fitted. The water entry inlet should be in the centre (not as shown in diagram 1 top left). Check that the tap faces are clean. Take care to ensure the DustValve™ does not fall out of its spindle position when inserted in the tap body. Fit first the handles without the flanges to test operation.

Four easy steps *continued*

Step 4

Turning the water back on

Now that you have checked and serviced your tapware and made the necessary repairs using the Doust Plumbing Products range, you should be ready to turn the water back on. Turn the isolating stopcock fully on and then back half a turn. This prevents the valve from jamming as it is rarely used. All taps should be in the fully open position with all aerators removed. Sinks and all plumbing fixtures should be free from articles for the unhindered flow of water to the drain. Care should be exercised to reduce the chances of a fixture flooding. The taps are left “on” for several reasons. One is it allows all filings to be washed through the line, another is you cannot damage the spindle when you tighten up the tap in the on position. Start by turning the basins off first as they are the most likely to flood. Finish with the bath or wash trough. In doing this you have also purged the water service of air. This means the homeowner will not run the risk of scalding or excessive splashing due to compressed air being trapped in the line.

If you have been following these instructions correctly the tap flanges should still not have been fitted. It is extremely important to check each of the tap's body washers and “O” rings for leaks. Also check under basins and sinks that the service work has not created a leak. Once you are confident there are no leaks, then fit the flanges, aerators (cleaned) and tap handles.

Completing the job

Clean and wipe over all the tapware, operate each individual tap to ensure it is functioning correctly. Watch out for brass filings in the shower recess, they will not usually wash away, vacuum if necessary.



No more drips!

Problems you may encounter in tap ware

IF THERE IS A BREAK IN THE SHINY CIRCLE

as shown in the overview in diagram 2, on page 4, then this represents a cavity in the brass. Although the brassware in Australia is of a very high standard and de-zinc'd, you can sometimes have a section corrode away.

EXTREME CARE MUST BE TAKEN IN GRINDING DOWN THE TAP BODY.

You should check your progress about every 8 revolutions. The surface you are grinding down is about 4mm thick, so there comes a point when you can go no further. Experience gives a "feel" to when the tap body has a smooth continuous surface.

WHAT TO DO WHEN YOU HAVE GROUND DOWN THE TAP SEAT AND STILL CAN'T GET A SMOOTH SURFACE.

Panic? Hardly! There are two overwhelming situations when DustSeats™ should be fitted, if you feel you have gone too far with re-surfacing or the seat in the tap is not directly in the centre (as per sketch page 3). Both circumstances cut out washers

extremely fast and usually result in the user being extremely disappointed. If you fit new DustSeats™ you can be confident that the whole tap has been brought up to a greatly improved standard. Whether it is an original or a replacement DustSeat™, it is important that the tap seats are square and centre to the operation of the DustValve™. DustValves™ will often seal on tap seats which are out of square, however if high pressures are involved the DustValve™ may sometimes oscillate when the tap is turned on. This is because the DustValve™ is trying to make up the discrepancy in the tap seat. The DustValve™ has the added advantage of overcoming the problem of sudden washer failure.

The DustValve™ is unaffected by hard water and high pressures and performs perfectly on square tap seats. Nearly every other tap washer on the market will drip in this type of situation, however, Dust Drip Proof Technology™ absolutely fights to stop the tap from dripping.

Most commonly asked questions

I HAVE EXCESSIVE NOISE IN MY TAP. Although a rare problem, all investigations we at Doust Plumbing Products have undertaken has resulted in the problem being solved by fitting DoustSeats™. Very high squeals are caused by the tap body being out of centre or square (as detailed in the diagram on page 4). This causes the water to pass at a greater velocity through one area than the other. Lighter valves or tap washers with excellent sealing materials are more likely to cavitate. The DoustValve™ actually becomes quieter with age, many tradespeople have developed different strategies to overcome the problem with inexpensive techniques, and in many instances they overcome a complex problem. However, while velocity noise will always remain, squaring and centering the tap body with a screwed tap seat is the best long-term solution.

WHEN I TURN MY HOT TAP ON THE WATER FLOW REDUCES OR STOPS. This is more noticeable with “plastic” type washers than brass ones. However the reduction in flow is mainly due to the expansion of the tap body. The DoustValve™ expands 1/10 of a millimetre from cold to hot. When mixing hot water the time taken is greatly reduced when the hot tap is turned on first. When hot and excising care to prevent scalding, adjust with the cold. This characteristic usually occurs in showers, especially low volume showers and is more noticeable in winter than summer or when the hot water unit is a long distance from the point of use. Many people do not notice these characteristics.

WHEN I TURN MY TAP OFF QUICKLY I HEAR A BANGING NOISE. This usually means there is some loose piping or a faulty non-return valve at the hot water unit. There is no tap washer on the market that can produce water hammer. Water hammer is the result of a high-pressure column of water coming to a complete stop. A tap is designed to take several turns in its

operation to overcome this problem. Usually water hammer is caused when the dishwasher, washing machine, and reticulations quick closing valves are operated. The ease in which the DoustValve™ halts and locks off the flow of water may amplify an existing problem, however it cannot create the problem. This type of a reaction to the DoustValve™ is really a compliment and testimony that the bladder with Drip Proof Technology™ actually works.

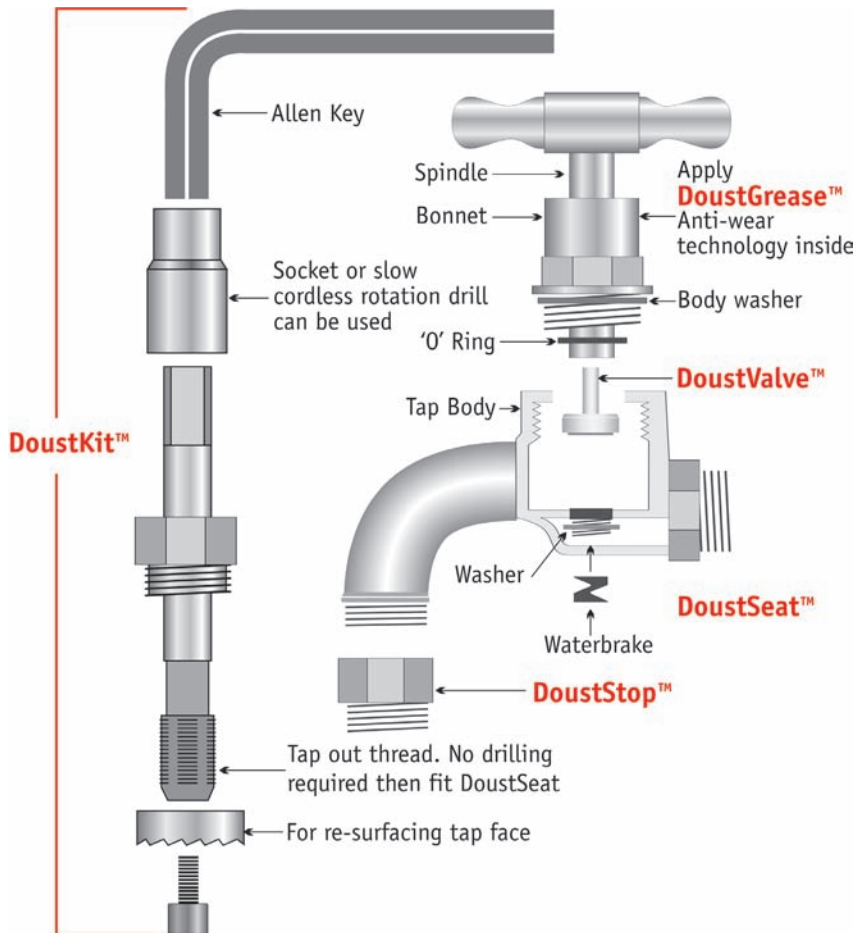
WHEN I TURN MY TAP ON I HEAR A SHUDDERING NOISE IN THE TAP. This generally appears only in areas with extremely high water pressure and is caused by the DoustValve™ attempting to compensate for deficiencies in the tap seat. Rectification of the seat with the DoustKit™ should cure the problem.

IS THE DOUSTVALVE™ SUITABLE FOR HOT AND COLD WATER? Yes, the bladder (yellow part) can handle temperatures of 135 degrees Celsius, while the stem (white part) can handle compression in temperatures to about 82°C. Most hot water units operate at under 75°C, by the time the hot water reaches the point of use, the 82°C is well within the working range required. If you have specific needs please contact us and we may be able to meet your specific requirements.

MY DOUSTVALVES™ ARE SO EASY TO TURN ON AND OFF, BUT WILL THEY LAST?

Yes! The DoustValve™ is the only tap washer on the market that will remain as easy to turn on and off as it did on the first day over a life span of at least 10 years. Which is now supported by actual installations and working tests. One test involved over 29,000 cycles alternating between cold and hot water at 80°C, and then the tap is turned off and must hold a pressure test. The actual valve, which completed the test seemed almost unmarked. Evidence in actual installations would suggest the life of a DoustValve™ should well exceed the life of a conventional washer in similar circumstances.

Solve tap problems with Doust Plumbing Products

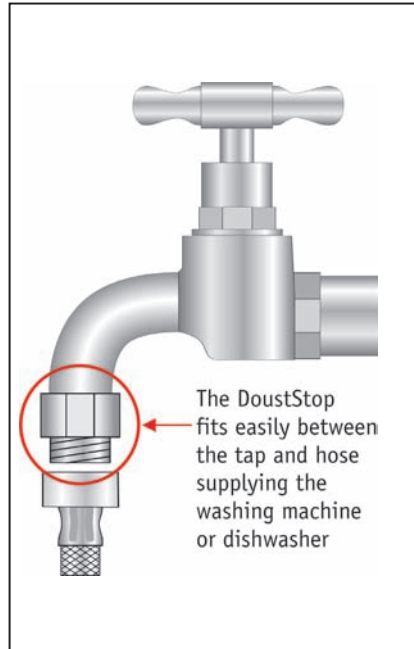


NOTE - Watch out for filings!

When fitting DoustSeats™, flush out the tap by turning water on with the bonnet and spindle fitted but without the DoustValves™. This is

necessary because any metal filings are extremely hard to flush out once the DoustSeats™ with the Waterbrake™ have been installed.

DoustStop™ Anti-Hammer Technology



The DoustStop™ Hammer Stop Control Valve uses the unique WaterBrake™ technology to slow the flow of water, this is hardly noticeable. However it helps reduce the velocity noise and when fitted to washing machines, allows the use of another tap in the home by helping to balance the water supply. The DoustStop™ is

designed for use after the StopCock for the reduction of water hammer, this is achieved by slowing the water and trapping the hammer in the delivery hose. Testing of the product in “actual” situations has proved the product to be very successful at reducing water hammer.

(Ref No. ATI-1) Barcode # 9322077000273

DoustValve™ Drip Proof Technology

The DoustValve™ is the worlds best and only 'active tap washer'. All other existing tap washers are 'passive', they work against the water pressure, while the DoustValve™ works with the water pressure. The famous DoustValve™ as shown, comes in packs of 2 and 10. Since its release in 1998, it has achieved major sales results. Doust Plumbing Products receive many calls and letters as



testimony to the advertised claims on the packaging. The main comments are "It's so easy to turn on and off"! If you have a heavy handed individual in your household, they can't damage the DoustValve™. The bladder just falls inside the protective outer housing, then the water pressure helps make the seal. That's Drip Proof Technology™ at work. This exclusive patented technology is only available in the DoustValve™. The legendary endurance of the DoustValve™ in high use or commercial installations just makes having DoustValve™ installed in your own home a must.

(Ref No. DVP-02) Barcode # 9322077000020

(Ref No. DVP-10) Barcode # 9322077000099



DoustValve™ Drip Proof Technology



The famous DoustValve™ now comes in a smaller 3/8 size for mini stops which represents the ideal solution for a jumper valve which must have the excellent sealing properties required on a stagnate tap seat. As the DoustValve™ materials are completely unaffected by chemical and hard waters which occur in many areas of Australia, the DoustValve™ will make the best water seal possible. Often an oxide build up on this type of tap seat can damage a conventional tap washer, when the washer is shut off, especially with force. The famous DoustValve™ bladder which functions in unison with the water pressure is always guaranteed of making the finest possible water seal, regardless of the water pressures encountered.

(Ref DVC- 2 3/8) Barcode # 9322077000334
Commercial quantities packed to order

DoustValve™ Bulk Pack convenience!



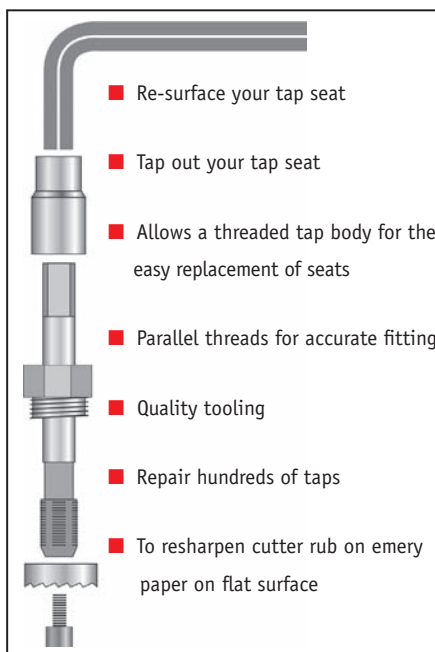
Commercial quantities are available of the Doustvalve and will be packed as required, as is the case with all our products. For commercial projects such as Retirement Villages, Hotels and Motels with group housing technical assistance is also available. It is well recognized that a dripping tap represents the greatest loss of water throughout Australia, the qualities of the famous Doustvalve being the only active tap washer in

the world, with the exclusive drip proof technology helps save water and reduce maintenance costs. Great reasons for the application of these products in your next commercial project.

Often our customer feedback can assist the installer in obtaining the optimum application of these products.

(Ref No DV-100) Barcode # 9322077000150

DoustKit™ Re-seating insert seats kit



The DoustKit™ allows you to overcome all the problems you may encounter in your tapware. You can fit the cutter to the base of the tool enclosed and resurface the tap seat. If you require the fitting of a DoustSeat™ you can also complete that task. Enclosed in the DoustKit™

are two DoustSeats™. If you have excessive water pressure and you want to save water, you can also fit the Waterbrake™ into the DoustSeat™. The DoustKit™ is composed of high quality components and should give you many years of service.

(Ref No. DK-1) Barcode # 9322077000266

DoustGrease™ Anti Wear Technology



NON PETROLEUM NON TOXIC

- Will not dry out.
- Place on sliding doors.
- Protect pool "O" rings from chemicals
- Apply to all hand pumps.
- Protect boating equipment



Can be purchased in single 50gram tubes without "O" rings and body washers.

Commercial quantities of tap body washers packed to order.

The DoustGrease™ pack comes with 10 clear, easy fitting tap body washers, which provide more protection against splitting when refitting. There are also 10 x 9/16

"O" rings which fit standard 15mm internal taps. DoustGrease™ is a non-toxic Australian made food standard grease suitable for potable water.

(Ref No. DG-1) Barcode # 9322077000303

DoustClean™ Tap Bonnet Cleaner



The inexpensive DoustClean™ tap bonnet cleaner is made rust proof and highly durable. Four flutes give you plenty of cutting power to clean the dirtiest of tap bonnets. Tap bonnets can sometimes become hard to use with dissolved soaps and grit which eventually find their way into the

housing. The exclusive four cutting action makes cleaning out your existing tapware a breeze. Naturally, as you have come to expect from Doust Plumbing Products, our tap cleaner was designed and made in Australia for our harsh conditions.

(Ref No. DC-01) Barcode # 9322077000204

WATER SAVER PRODUCTS

DoustFlow™ Anti-Hammer Water Saver Technology



The Doustflow Anti Hammer Water Saving Control Valve is the perfect solution for the splashing which occurs with most flick mixers, whilst saving water - and in most cases any existing water hammer is eliminated. The DoustFlow™ is also fitted with a recess for easy connection to flexible connectors prior to flick mixers,



with a tapered female iron thread as required by Australian Standards for a watertight seal with the use of thread seal tape. Also provided is the following technical information:

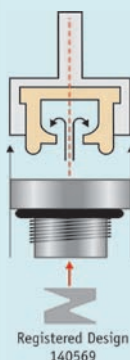
- Manufactured from dezincified resistant brass 352 to Australian Standards AS/NZS 3718
- Suitable for use with drinking water as per Australian standards
- Operating pressure range 150kpa - 500 kpa
- Temperature range 5c - 80c
- Withstands test pressures in excess of 2,100kpa
- 16.3 litres per minute @ 700kpa

Flow Pressure	Flow Rate
150kpa	8.0 l/min
250kpa	10.4 l/min
350kpa	12.1 l/min
500kpa	14.1 l/min

(Ref No. ATIDF) Barcode # 9322077000068

WATER SAVER PRODUCTS

DoustSeat™ Water Saving Technology



The DoustSeat™ with the 'Waterbrake™' is absolutely the best water saving device in the world! Why? Because with the DoustSeat™, you don't even realise that you are saving water! Unlike other water saving devices you cannot notice the difference in flow. With the DoustSeat™ 'Waterbrake™', you can adjust the flow and still save

68% in water regardless of how fast or slow you adjust the tap flow. Independent tests show 68% water saving at all three main flow rates. Other major advantages over existing conventional water saving devices is that it's self cleaning, has no fine opening to block up and the DoustSeat™ works with all hot water units including instantaneous. In our research, you the consumer told us you wanted ease of use above all else whilst saving water. Our design team came up with the 'Waterbrake™', a world first and as with all our products, proudly made in Australia for our harsh conditions. Another great advantage of the DoustSeat™ is that when it is fitted to all your internal taps you can usually run two showers at the same time. This is known in the industry as water balancing. Built in advantages that make the DoustSeat™ a must for your home or office.

(Ref No.DS-4) Barcode # 9322077000242

WATER SAVER PRODUCTS

DoustSave™ Water Saver Control Valves



The all new, patented Doustsave Water Flow Control Valve™ is the only high quality, self cleaning mechanically fitted water saving valve with a full **10 YEAR GUARANTEE.**

Why mechanically fitted? Because you want and need precision, perfectly fitted tap seats.

Why a new tap seat? Because unlike other water saving products fitted to the outlet of the taps, you don't want to pressurise the low pressure side of the tap which can result in the spindle "O" ring leaking and then costly repairs.

Why self cleaning? Because with a self cleaning moving DoustValve™, maintenance of fine restrictors which

often occurs with other products is eliminated.

Why the DoustValve™? The DoustValve™ is the only patented active tap washer in the World, all other tap washers are passive, they require extreme force which result in wear to make a water seal. The DoustValve™ being active allows the water pressure to enter the bladder and make the water seal, the water pressure does all the work and what's more we have very little wear as the DoustValve™ cannot be damaged by over tightening.

(Ref No.DS-6) Barcode # 9322077000396

(Ref No.DS-9) Barcode # 9322077000389

(Ref No.DS-12) Barcode # 9322077000372



DOUST PLUMBING PRODUCTS

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Proudly Australian made

WARNING: Some of the range of Doust products are protected by National, International Patents and registered designs. There are variations to these products not featured in this booklet which may apply to specific International markets. These products, while having a variation in design, also have patent protection.