



Information Booklet

9" Metal Shrinking Disc

ASD-9

A product of





Metal Shrinking Discs

Ever wondered how the pros are able to bring a panel back to life without using tonnes of filler?

Well here it is;

'AckoShrink', a product of Xtreme Restorations by Chad Ackland, has developed a 9" metal shrinking disc to help revive those tired and damaged panels with minimal or no use of filler.

Made from stainless steel, the disc is designed to fit any standard 9" sander/grinder/polisher and works particularly well on large panels such as bonnets, doors, guards and roof for example.

It can be used on a number of surfaces including steel, stainless and aluminium, however to avoid cross contamination we don't recommend using the same disc on different surfaces.

The disc enables you to shrink back the overworked and damaged areas on a panel and repair them like new. You will find there is better heat placement whilst using a shrinking disc and therefore the heat can be dispersed more accurately between the highs and lows on a damaged panel, unlike using other methods of shrinking which can often result in the panel warping.

The key to shrinking the metal is based on *the heating/cooling method*. This process involves the heating up of metal through friction between disc and panel, causing the metal to expand. The surrounding cooler metal will help restrict a lot of the heat however by applying a wet cloth or spraying water immediately over the worked area, the heat is further contained and cooled allowing the heated metal to then contract and shrink.

With nearly 20 years experience working in the car industry as a panel beater and metal fabricator, Chad has worked with both the ribbed and flat surface discs. He finds the ribbed discs are more beneficial. Not only does the ribbing add strength and works as a stiffener to stop the stainless moving around it also creates air pockets to keep the disc cool whilst allowing it to heat the panel being worked on. It too creates a fine hammering action that he feels helps with the shrinking process.

The art of using a shrinking disc can be difficult but certainly a skill worth having, especially for the keen metal fabricator.



Metal Shrinking Disc - Instruction Guide

1. Before starting, the surface needs to be clean, stripped of any primer or paint and taken back to bare metal. If there are significant lows then you can repair with hammer and dolly or dent pulling machine first.
2. Choose one of the following tooling;
 - a. 9" Grinder
 - b. 9" Sander or
 - c. 9" Polisher(Recommended RPM between 3000-6000, max RPM 6500)
3. Ensure the sanding backing pad supplied with the selected tool is fitted correctly
4. Fit the AckoShrink aluminium backing pad
5. Followed by the AckoShrink stainless steel shrinking disc
6. Ensure discs are lined up and seated properly before securing locking nut
7. You will need to grab a wet cloth or water sprayer for the cooling method in the shrinking stage
8. Turn on the selected tooling and run disc at operating speed
9. It's now time to make contact with the metal;
 - a. Applying pressure, run the shrinking disc back and forth over the stretched/damaged panel
 - b. Immediately cool with a wet rag or water sprayer
 - c. Assess the panel and repeat shrinking process if required



3. Sanding backing pad



4. AckoShrink aluminium backing pad



5. AckoShrink stainless steel disc



Before and after shrinking disc applied to the roof of a 1956 F100

SAFETY OPERATING PROCEDURES

Grinder-Polisher-Sander For Shrinking Disc

DO NOT use this machine unless an authorised person has instructed you in its safe use and operation and has given permission.



Safety glasses must be worn at all times in work areas



Long and loose hair must be contained.



Appropriate footwear must be worn at all times in work areas.



Close fitting/protective clothing must be worn



Hearing protection must be worn when using this machine.



Rings and jewellery must not be worn



Gloves must not be worn when using this machine.

PRE-OPERATIONAL SAFETY CHECKS

1. Ensure the power tool has a suitable safe work area
2. Check that the disc, guards and handle are secure
3. Examine power lead and plug for obvious damage
4. Check workspaces and walkways to ensure no slip/trip-hazards are present
5. Check that all safety guards are in position and are operational
6. Ensure you are familiar with the operation of the ON/OFF starter
7. Faulty equipment must not be used. Immediately report suspect equipment

OPERATIONAL SAFETY CHECKS

**Never Operate a Faulty Electrical Power Tool
-Report it to your Supervisor-**

1. Do not plug in until all adjustments have been made
2. Always use original backing pad supplied with the tooling
3. Do not fit shrinking disc if it has been dropped and bent, damaged or stress fractures appear
4. Ensure your work piece is firmly secured and supported
5. Keep fingers, hands and power cord clear of the disc
6. Use the power tool only in a designated work area
7. Allow the tool to reach operating speed, then apply load gradually
8. Maintain complete control. Always operate with both hands. Maintain a proper and steady footing at all times
9. Avoid prolonged use and high pressures. This could over heat the motor
10. Turn off after use. Do not place the tool down until the disc has stopped rotating

Recommended RPM 3000-6000 Max RPM 6500

HOUSEKEEPING

1. Do not lift or carry the tool by the power cord
2. Leave the work bench and machine clean and tidy

POTENTIAL HAZARDS

- Rotating sharp, abrasive parts
- Electricity
- Eye injuries





AckoShrink
Made in South Australia by
Xtreme Restorations Pty Ltd
3 Main North Road Watervale SA 5452
E: info@xtremerestorations.com.au