Pipe Flaring Tool Kit
(for on-car use)

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Introduction

4850 Brake Pipe Flaring Tool Kit
(for on-car use)

- Designed for ease of use and to produce high quality pipe flares on the vehicle.
- Hydraulic ram provides maximum power for precision flaring.
- Creates SAE and DIN single and double flares (3/16" and 1/4" pipe).
- The ability to flare pipes on the vehicle allows for accurate repair sections to be spliced in after accident damage or repair work.

Flaring Tool Kit Components

1: De-burr tool
2: Hydraulic ram
3: Tool body
4: Ram mount
5: Handle
6: Lever
7: Dies
8: Punches
**Operation and Use**

1) The end of the pipe must be cut square.

2) The outside edge of the pipe must be chamfered by approximately 1/4" x 45°.

3) The bore of the pipe must be de-burred using the tool provided in the kit (1).

4) If the pipe is plastic covered, this must be removed for a minimum of 3mm from the end of the pipe to be flared. Make sure the pipe is not scored or any metal removed when doing this. Do not use abrasive cloth.

5) After flaring, blow any debris from the pipe.

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### SAE Convex Flare

<table>
<thead>
<tr>
<th>Tube Ø Diameter</th>
<th>Punch OP1</th>
<th>Punch OP2</th>
<th>Die Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16&quot;</td>
<td>OP1 3/16</td>
<td>OP2 3/16</td>
<td>4.75mm</td>
</tr>
</tbody>
</table>

### DIN Convex Flare

<table>
<thead>
<tr>
<th>Tube Ø Diameter</th>
<th>Punch OP1</th>
<th>Die Set (Reverse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16&quot;</td>
<td>DIN 3/16</td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>DIN 1/4</td>
<td></td>
</tr>
</tbody>
</table>

### SAE Double Flare

<table>
<thead>
<tr>
<th>Tube Ø Diameter</th>
<th>Punch OP1</th>
<th>Punch OP2</th>
<th>Die Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16&quot;</td>
<td>OP1 3/16</td>
<td>OP2 3/16</td>
<td>4.75mm</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>OP1 1/4</td>
<td>OP2 3/16</td>
<td>1/4&quot;</td>
</tr>
</tbody>
</table>

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6) Consult the chart on the opposite page and the diagrams above and select the die specified to produce the required flare on the diameter of brake pipe specified.

**NOTE:** After the brake pipe has been prepared as instructed on page 4, **ensure the tube nut is fitted to the pipe!**
7) Screw handle (5) into underside of tool body (3). Place chosen die (7) into tool body; it will be held in place by the magnets. Pass the brake pipe through the rear of the die until the prepared end is flush with the front face of the die. Tighten the die securing screw with the lever (6).

Note: this must be **very tight** to adequately secure the brake pipe – if not, the pressure of the flaring punch action may push the pipe backward out of the die. Once tight, check that the positions of the pipe and die are still correct.

8) Place the ram mount (4) on to the tool body (3) – it will snap into place.
9) Consult the chart on page 4 and the diagrams on page 5 and select the specified punch.

10) Loosen rear hex drive (1) so that it is not applying pressure on the hydraulic ram by turning anti-clockwise.

Assemble the punch (3) to the ram (2) – **Note:** this is a left-hand thread so tighten by turning anti-clockwise.

Tighten with 14mm spanner or socket.

Then screw the punch/ram assembly into the ram mount on the tool.

11) Attach the handle (6) to the hydraulic ram and turn clockwise – turn fully home – this will compress the pipe to form the flare.

Once flare is complete, turn lever anti-clockwise to release the hydraulic ram.

Then unscrew the punch/ram assembly from the ram mount on the tool.
If the required flare has a second operation (double flare), consult the chart on page 4 and choose the correct OP2 punch. Then follow step 10 again from page 8. Once flare is complete, unscrew the punch/ram assembly from the ram mount on the tool. Lift off ram mount from tool. Refit lever (6) to die securing screw, and release die (7) from tool body (3). If necessary, a gently tap on a suitable surface will release the dies from the pipe.

Finally, check the quality of the flare to ensure the pipe did not move during the flaring operation(s).
Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: +44 (0) 1926 818186. Normal wear & tear are excluded as are consumable items & abuse.

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