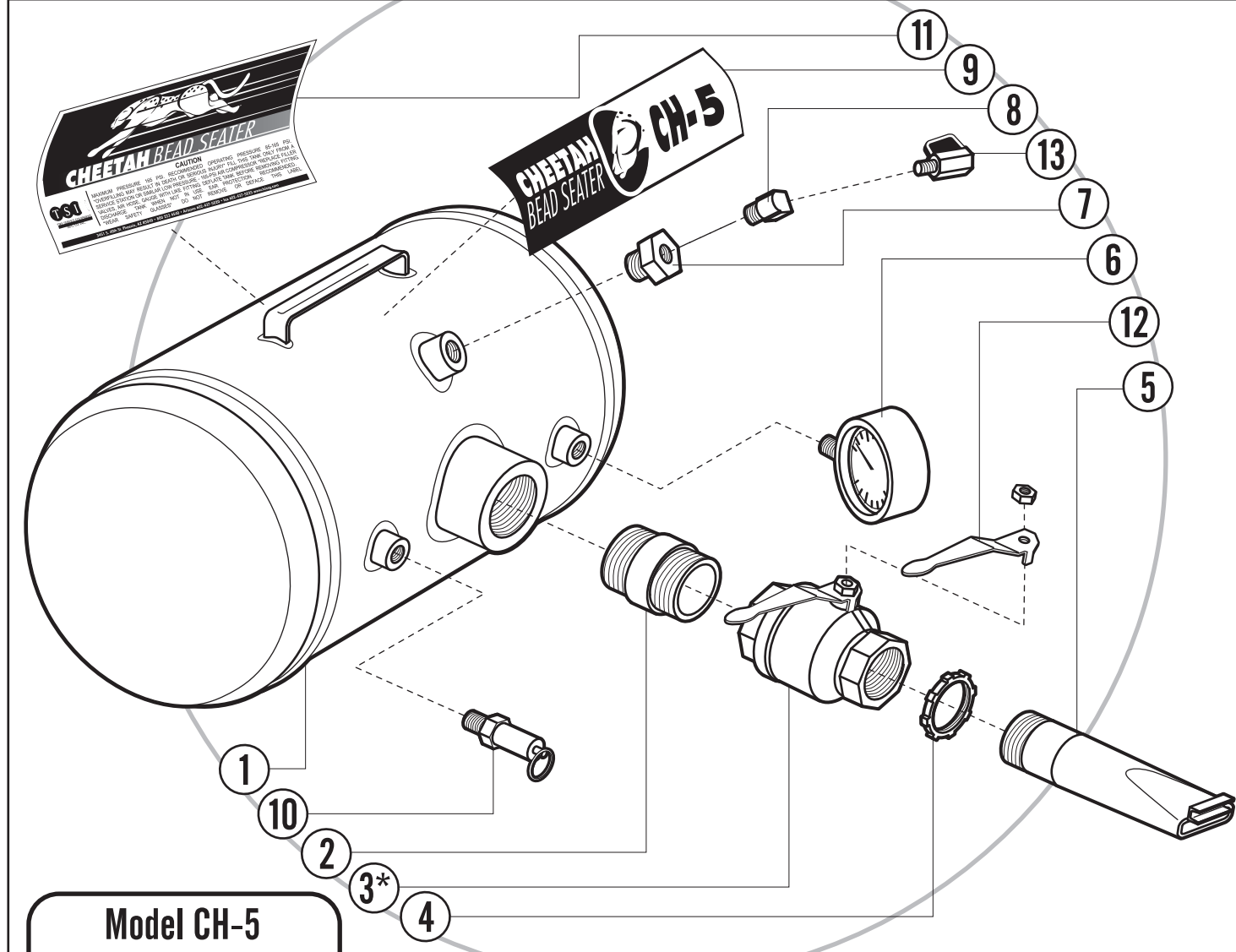


CHEETAH BEAD SEATING TOOL

11.2002



Repair Parts & Prices

No.	Description	Part No.	No.	Description	Part No.
1.	Airtank	02.101	8.	90° NPT	03.104
2.	Pipe Nipple	01.104	9.	Decal (Small)	01.113
3.*	Discharge Valve	02.102	10.	Safety Release Valve	05.102
4.	Lock Nut	02.107	11.	Decal (Large)	01.112
5.	Threaded Barrel	02.103	12.	Handle & Nut Only	01.230
6.	200 psi Gauge	01.106	13.	Ball Valve	04.103
7.	3/4"-1/4" Bushing	01.107			

*Includes Handle

Order parts from your distributor or jobber. When ordering parts always give the following information: Part Number, Description and Serial Number of Your Machine.

REMINDER: Always exercise caution when using compressed air.

3451 South 40th Street · Phoenix, Arizona 85040 · toll free 800.223.4540 · Arizona 602.437.5020 · fax 602.437.5025

OPERATING & MAINTENANCE INSTRUCTIONS

CH-5 CHEETAH BEAD SEATER

READ INSTRUCTIONS THOROUGHLY BEFORE OPERATING



TIRE SERVICE EQUIPMENT
MFG. CO. INC.

CHEETAH BEAD SEATING TOOL INSTRUCTION MANUAL

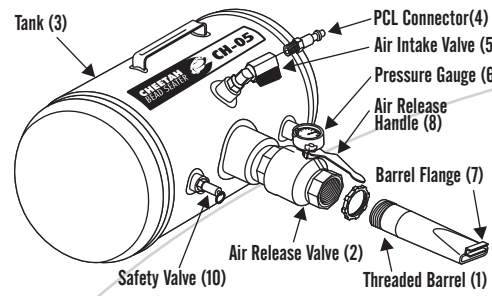


Figure 1 - Cheetah Bead Seating Tool - Major Components

Air Release Valve (2). Read the following instructions and safety information before use.

GENERAL PRINCIPLE OF OPERATION OF THE CHEETAH:

Ordinary air supply lines for inflating tires do not deliver air quickly enough to expand a large or inflexible tire sufficiently to seal the tire bead onto the wheel rim. The Cheetah includes a tank (3) of compressed air which is delivered by a quick-acting Air Release Valve (2) and a large diameter barrel (1) into the tire. Because a larger volume of air is delivered very quickly, the tire bead is lifted onto the rim, creating an air tight seal and so allowing the tire to be inflated.

FILLING THE CHEETAH

The Cheetah can be filled from any general commercial compressed air source. Refer to the Tank Pressure Information Table. Decide which Tire Type in the table most closely matches the tire you intend to inflate and identify the Suggested Tank Pressure. Ensure the Air Release Valve (2) is closed, attach the supply air line to the PCL connector (4) on the Cheetah then open the Air Intake Valve (5) to fill the Cheetah. When the Pressure Gauge (6) indicates the Suggested Tank Pressure has been reached, close the Air Intake Valve (5) and disconnect the supply air line.

USING THE CHEETAH ON A HORIZONTAL TIRE AND WHEEL:

Place the wheel and tire flat on a tire stand so the lower side wall of the tire is slightly off the floor. Seat the lower tire bead on the bottom (narrow) flange of the wheel. Fit a supply air line to the tire valve to complete tire inflation after the bead is seated. Rotate the barrel (1) so the barrel Flange (7) is on top (i.e. the same side as the Air Release Handle (8) - as shown in figure 2). Hold the Cheetah at about 40° from the vertical and rest the barrel Flange (7) on the upper edge of the wheel rim opposite the tire valve and so that the barrel (1) is pointing into the opening between tire and rim. Check no-one is too close and warn others that you are about to release the air from the Cheetah. Hold the Cheetah Handle (9) firmly in one hand and with the other turn the Air Release Handle (8) to fully open in one movement, so releasing the air into the tire. When the bead has seated, use the supply air line to inflate the tire to its operating pressure.

USING THE CHEETAH ON A VERTICAL/UPRIGHT TIRE AND WHEEL (EXTRA CARE NEEDED):

Use this vertical/upright method when there is a large gap between the wheel rim and tire bead or if the tire is particularly heavy.

Safety Note: the tire and wheel must be leaning slightly back and be secured by a wedge. **IMPORTANT!**

Support the wheel away from the wall so that the inflated tire will not be touching the wall. Otherwise, when inflating, the tire may push against the wall and cause the wheel and tire to fall forwards on top of the operator.

The back bead of the tire (furthest from the operator) should be seated against the wheel rim to trap the air. The front or wide flange of the wheel should be facing the operator. The valve stem should be at the bottom

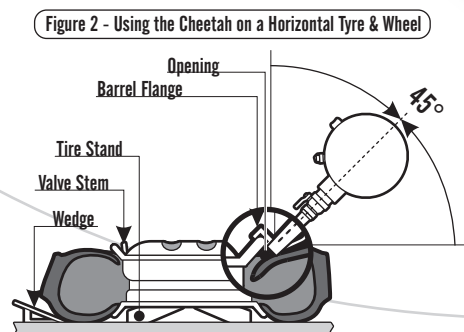


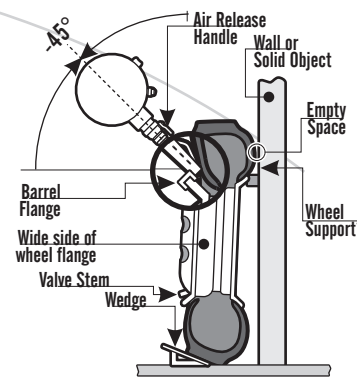
Figure 2 - Using the Cheetah on a Horizontal Tyre & Wheel

PREPARING THE CHEETAH FOR USE:

Check the Cheetah has arrived in good condition, with no signs of shipping damage, and that you can identify each of the parts named in figure 1. The Cheetah should arrive fully assembled except for the barrel (1) which must be fitted before use. To fit the barrel (1), thread it firmly onto the

of the tire. Fit a supply air line to the tire valve to complete tire inflation after the bead is seated. Rotate the barrel (1) so the barrel Flange (7) is underneath (i.e. the opposite side from the Air Release Handle (8) - as shown in figure 3). Hold the Cheetah at about 40° from the horizontal and locate the barrel Flange (7) against the edge of the wheel rim near the top of the wheel, and opposite the valve stem, so that the barrel (1) is pointing into the opening between tire and rim. Check no-one is too close and warn others that you are about to release the air from the Cheetah. Hold the Cheetah Handle (9) firmly in one hand and with the other hand turn the Air Release Handle (8) to fully open in one movement, so releasing the air into the tire.

Figure 3 - Using the Cheetah in an Upright Position



HELPFUL HINTS

PRESSURE

The pressures listed in the Tank Pressure Information Table can be used as a starting point and then adjusted up or down as necessary. Adjust the pressure downwards if, when the Cheetah is applied, the tire bead appears to seat at first and then falls off again (this happens because too much air in the Cheetah has pushed the tire back off the rim after it has seated). Adjust the pressure upwards if the Cheetah does not lift the tire bead far enough.

LUBRICATE

Lubricate all tire beads properly before using the Cheetah. It can seem the Cheetah is failing as it lifts the bead or the bead can fall off once seated. This may be due to poor bead lubrication.

ANGLE TO APPLY CHEETAH BARREL (1)

The angle at which the Cheetah is applied is important. Too steep, and the air will hit the outside of the tire, and push it away from the rim. Too shallow and the air hits the rim and does not go into the tire. Angle the Cheetah so that the barrel (1) points directly into the gap between the tire and rim.

WHERE TO APPLY CHEETAH

The most effective position to apply the Cheetah is opposite the tire valve. This results in both sides of the tire receiving an air supply. Another factor is the size of the gap between wheel rim and tire bead. The Cheetah should be applied at the place where the gap is largest. This ensures that the maximum amount of air enters the tire, creating the maximum lift, in the area with the worst problem. If a wedge has been properly used, the largest gap should be opposite the valve.

USE OF A WEDGE

A wedge, such as included in the Cheetah Accessory Pack is used to ensure that the air from the supply line going into the valve is not wasted directly in to the air. Position the wedge under the tire close to the valve stem (figures 2 & 3). Try to position the tire to cover the valve.

AIR LINE SAFETY

The air line supplied with the Cheetah Accessory Pack is designed to deliver the maximum volume of air and let the operator have both hands free to operate the Cheetah. The air line supplied with the Cheetah Accessory Pack must only be used for the initial seating of the bead. Do not use the air line supplied with the Cheetah Accessory Pack for the inflation of tires beyond 12 psi (0.8 bar).

OPERATING THE AIR RELEASE HANDLE (8)

The Air Release Handle (8) should be turned quickly and fully in one movement.

STORAGE

The Cheetah should be stored by hanging by the handle with the valve open. This allows any moisture to drain from the tank when the Cheetah is not in use. It also protects the barrel (1) and other attachments on the Cheetah from damage.

SAFETY NOTES - IMPORTANT!

The Cheetah uses compressed air. Please ensure that it is only used for the purpose for which it was designed. The following safety procedures must be observed. Ensure that the Cheetah is only charged immediately before use. **NEVER STORE OR TRANSPORT A CHARGED TANK!**

CONSTRUCTION

The barrel is threaded on to the air intake valve to allow for rotation. Check when operating the Cheetah the barrel is orientated in accordance with the manual and the barrel has been tightened. Note that the pressure gauge accuracy is +/- 10%.

AIR SUPPLY

The Cheetah is a high quality tool, approved to CE, ASME, TÜV and BS EN 286 standards. It has been tested by the manufacturer to 165 psi (11 bar), and has a pressure release valve which will not allow it to exceed that pressure. The Cheetah must be charged from a clean, oil-free, dry air supply. The Cheetah should only be charged from a low pressure airline system (up to 165 psi/11 bar). The Cheetah should never be filled with anything other than air at ambient temperature.

HEARING PROTECTION

Ear defenders must be worn at all times when discharging the Cheetah. The Cheetah produces high level noise which can seriously damage hearing. The recommended defenders are: Foamed polymer ear plugs. Consideration must also be given to people working close to the Cheetah.

Noise Specification (Assuming the Cheetah is used, on average, 6 to 10 times per day):

Average Equivalent Noise Level (L/Aeq) < 70 dB.
Peak C Weighted Instantaneous Sound Pressure = 135 dB = 112.46 Pa.

(Measurements were taken discharging the Cheetah into free air. The noise level is reduced when discharged at a tire and rim.)

EYE PROTECTION

Eye protection must be worn whenever the Cheetah is discharged. Dust, swarf, rust and other particles may be blown back into the user's eyes. Recommended goggles are polycarbonate safety goggles to BS 2092 grade 1 standard.

TIRES - EXPLOSION RISK

Before using the Cheetah on a tire or inflating any tire consider:

- Tire Damage - Inspect the tire for damage. Do not inflate damaged tires.
- Split Rims - Ensure that any locking ring is firmly in place.
- Inflation - Do not over inflate the tire.

Use a safety cage for inflating large tires or tires at high pressures.

OTHER USES

Under no circumstances use the Cheetah for any purpose other than that for which it was designed. In particular:

- Do not store or transport a charged tank.**
- Do not** use it for dusting down equipment or people.
- Do not** discharge the Cheetah towards anyone.
- Do not** clean a tire with a flammable solvent before using the Cheetah.
- Do not** subject the tank to any stress or impact that might weaken it.

MAINTENANCE

NOTE: DROP DAMAGE WILL NOT BE COVERED UNDER WARRANTY!

Check the Cheetah regularly for damage or signs of wear. The tank must be maintained in accordance with BS EN 286 Part 1. To comply with regulations, and for insurance purposes ensure that the tank is inspected inside and out by a competent person every 12 months. Check that:

- There are no cracks in the tank, or any of the fittings.
- The barrel (1) is not damaged or bent and there are no obstructions to the barrel.

The recommended maintenance period is every year. Never tighten or loosen fittings while the cylinder is charged.

DRAINING

Ensure the Cheetah tank is drained regularly. This is best done by hanging up with the Air Release Handle (8) open and the barrel (1) pointing down.

ACCESSORIES AND SPARE PARTS

The Cheetah bead seating tool has associated accessories which can make it more convenient to use. A Cheetah Accessory Pack includes one each of the following.

TIRE STAND

A tire stand designed to hold the wheel and tire in the best position for applying the Cheetah is also available.

TIRE WEDGE

The tire wedge is used to support the tire to maximize bead contact with the rim. Place the wedge under the side of the tire near to the valve. This ensures that air entering through the valve goes into the tire, and does not escape straight away.

LOW PRESSURE AIR HOSE

This is a ball-valve operated airline which enables the fitter to operate the airline connected to the tire valve stem easily while handling the Cheetah. Improves the safety of the product as the operator is in full control of the air supply.

TANK PRESSURE INFORMATION TABLE

These are recommended pressures to start with. Individual circumstances may require somewhat higher or lower pressures.

VEHICLE TYPE	TIRE TYPE EXAMPLES	SUGGESTED TANK PRESSURE	TIPS
ATV	16-650-8 22-11-8 25-12-9 24-9-11	40 psi (2.7 bar)	Fit on stand, with stand in highest position. Can be fitted with the valve at the bottom.
Lawn Tractor	16-650-8 23-1050-12 26-12-12	40 - 50 psi (2.7-3.4 bar)	Use the stand in the highest position
Car	13" Rims 14" Rims	50 - 60 psi (3.4-4.1 bar)	If difficult, do not place on the stand - lean the rim against it. Ensure that valve is covered. Lubricate well.
4 X 4	15" Rims 16" Rims	60 - 80 psi (4.1-5.4 bar)	Fit in vertical position. Lubricate well. Ensure that the valve is covered by the tire
Truck	11-22-5 18-22-5	100 (6.8 bar) 120 (8.2 bar)	Can be fitted vertically - i.e. still on the truck. Rotate the Cheetah Spout to the correct position. If using stand, use in the lowest position.
Tractor	Up to 28" Over 28"	100 psi (6.8 bar) 120 (8.2 bar)	Fit horizontally, position the bottom bead on the rim, use the tire wedge.
Large Tractor	Terra Tires 48-31-20 66-43-25	120 psi (8.2 bar)	Fit vertically. Roll tire until the back bead is in position. If you fit a lot of these, enquire about the larger Cheetah