



INSTRUCTION MANUAL

#11020 "COMBI TIRE" BEAD BREAKER



WARNING!

To avoid serious personal injury, always wear proper protective gear, such as hard hats, safety glasses, gloves, and steel toe shoes when using hydraulic equipment. Failure to chock the wheels and crib the vehicle can result in serious injury or death. Always deflate tires before removing a wheel, a rim, or part of a rim clamp or nut. If you do not deflate the tire, the tire could explode, causing serious injury or death. Always stand to one side of the rim when using the bead breaker. Standing to one side of the bead breaker allows you to maintain control of the bead breaker. If it is not seated properly and flies off the rim, the bead breaker could cause serious injury or death.

Important Receiving Information

Visually inspect all parts for shipping damage. If you find shipping damage, notify the carrier at once. Shipping damage is not covered by your warranty. The carrier is responsible for all costs of replacement or repair caused by shipping damage. Warranty of this unit will be void on any part if the unit subjected to misuse due to overloading, abuse, lack of maintenance and unauthorized modifications. No warranty – verbal, written or implied – other than the official, published AME new machinery and equipment warranty will be valid with this unit. In addition, it is your responsibility to be aware of existing Federal, State and Local codes and regulations governing the safe use and maintenance of this unit.

Description

The 11020 Bead Breaker is used on all types of rims except 5-piece earthmover rims. It is ideal for use with truck, farm tractor, grader, combine, and skidder tires. The 11020 can be used with a model (15000), (15020), (15004), or equivalent 10,000 psi [700 bar] pump.

Safety Information

To avoid personal injury or property damage while using this product, read and follow all DANGERS, WARNINGS, CAUTIONS, and INSTRUCTIONS that are attached to, or included with, this product.

1. Follow the instructions of the tire manufacturer and the vehicle manufacturer when deflating, demounting, mounting, and inflating tires.
2. These operating instructions do not apply to any specific rim. Therefore, contact the rim manufacturer for the correct procedure for your rim.
3. For the publication, "Multipiece Rim Matching Chart" contact the United States Department of Labor, Occupational Safety, and Health Administration (OSHA), Washington, DC, 20210, 202-219-6091, or contact AME Intl. at 1-877-755-4263. If you are outside the U.S., contact your local government officials.
4. AME Intl. cannot be held responsible for damage or injury resulting from unsafe use of this product; lack of maintenance; or incorrect product and system application.
5. Contact AME Intl. when in doubt about safety precautions or applications.

CAUTION!

BEFORE USING THIS TOOL, READ INSTRUCTIONS THOROUGHLY. THE USE OF THIS TOOL IN ANY OTHER APPLICATION IS BOTH A VOID OF WARRANTY AND CAN LEAD TO INJURY OR EVEN DEATH.

Operating Instructions

REMOVING THE WHEEL

1. Chock the wheels opposite of the jack.
2. Jack up the vehicle.
3. Crib the vehicle with safety stands or blocking devices after jacking it up. Do not work under an unblocked load.

DANGER! FAILURE TO CHOCK THE WHEELS AND CRIB THE VEHICLE CAN RESULT IN SERIOUS INJURY OR DEATH.

4. Remove the valve core; deflate the tires completely.
(See fig. 1)
5. Insert a thin piece of wire through the valve stem to make sure air is flowing freely and the valve stem is not blocked.

NOTE: Deflate both tires if you have dual mounting. Always deflate tires before removing a wheel, a rim, or part of a rim, such as a rim clamp or nut. If you do not deflate the tire, the tire could explode, causing serious injury or death.

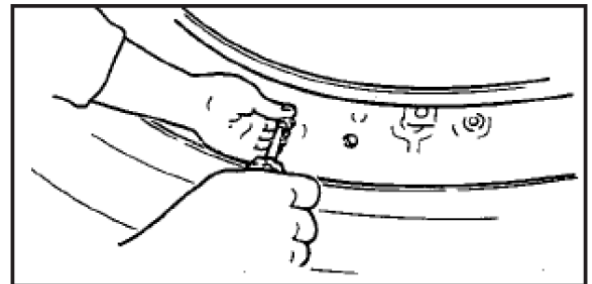


Figure 1

WARNING!

This product as well as all tire tools should never be used by persons unless they have been properly trained according to O.S.H.A. Regulation #29CFR1910.177 entitled "Servicing Single-Piece and Multi-Piece Rim Wheels."

- 6a. If you are breaking the tire bead with the wheel on the vehicle: proceed to "Positioning the Bead Breaker" below.
- 6b. If you are breaking the tire bead with the wheel off the vehicle: Remove the tire/rim assembly from the vehicle and place it flat on the ground with the gutter side up. Then proceed to "Positioning the Bead Breaker" below.

POSITIONING THE BEAD BREAKER

Positioning the bead breaker, so that the wedge-shaped teeth will grab evenly under the rim flange when clamping the jaw tightens. (See Fig. 2.) **NOTE:** Make sure the bead breaker is about 30°, or at least 12 inches [0,3 m], to the one side of the flange butt weld.

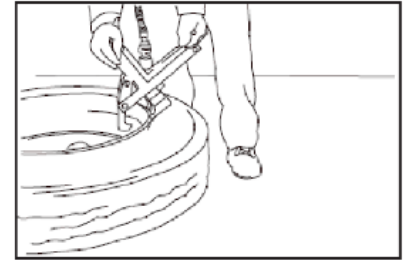


Figure 2

ACTIVATING THE BEAD BREAKER

Run the air hydraulic pump so that the clamping jaw begins to tighten against the rim. (See Fig. 3.) Make sure the wedge-shaped teeth are placed well into the tire bead and against the rim flange. **NOTE:** To grab the rim flange evenly, you may have to try several times. Do not force the bead breaker when grabbing the rim flange.

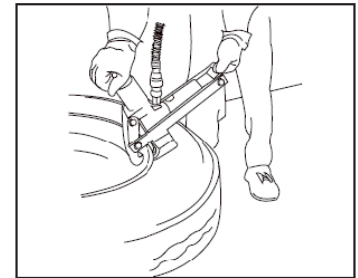


Figure 3

CAUTION!

THE BEAD BREAKER USES A LONG STROKE AND HIGH FORCE. BE CAREFUL NOT TO DAMAGE OR BEND RIM PARTS, SUCH AS THE FLANGE BUTT WELD, WHEN USING THE BEAD BREAKER.

2. Continue to apply hydraulic pressure until the bead breaking ram extends about 1/4 inch [6,35 mm] from the bead breaker. (See Fig. 4.)
3. Maintain the bead breaker, so that it is nearly perpendicular (90°) to the rim. (See Fig. 5.) If necessary, adjust the position of the bead breaker.
4. Step away from the bead breaker. (See Fig. 6.)

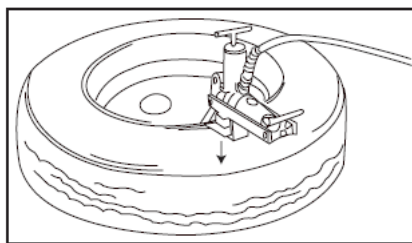


Figure 4

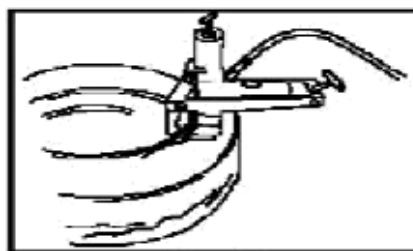


Figure 5

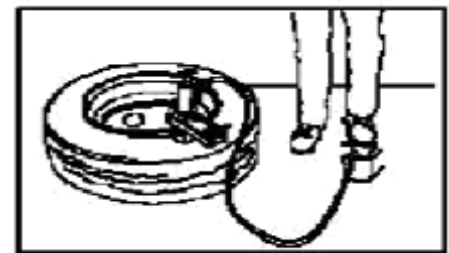


Figure 6

DANGER!

Always stand to one side of the rim when using the bead breaker. Standing to one side of the bead breaker allows you to maintain control of the bead breaker. Do not hold the bead breaker when breaking the tire bead. If it is not seated properly and flies off the rim, the bead breaker could cause serious injury or death.

- Continue to apply hydraulic pressure until the bead breaking ram extends about 1/2 - 3/4 inch [13-19 mm] from the bead breaker. (See Fig. 7.) NOTE: Never try to break the tire bead with only one push. Instead, proceed to "Continuing to Break the Tire Bead". Move the bead breaker 8-12 inches [0,2 -0,3 m] from its current position.

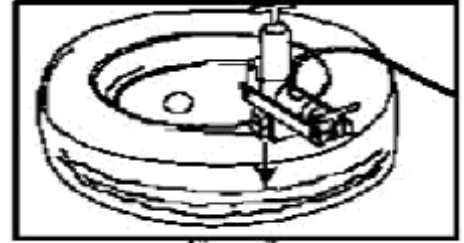


Figure 7

BREAKING BEAD ON THE OTHER SIDE

Repeat steps, starting with "Positioning the Bead Breaker", until the rim is completely separated from the tire bead low.

CONTINUING TO BREAK THE TIRE BEAD

Repeat steps, starting with "Positioning the Bead Breaker", until the rim is completely separated from the tire bead low.

- Turn the tire over on the other side.
- Repeat all steps, starting with "Positioning the Tire Bead" on page 2.

Mounting & Inflation

JACKING UP THE VEHICLE

- Chock the wheels opposite the jack.
- Jack up the vehicle.
- Crib the vehicle with safety stands or blocking devices after jacking it up. Do not work under an un-blocked load.

DANGER!

Failure to chock the wheels and crib the vehicle can result in serious injury or death.

INSPECTING THE TIRE & RIM

- Inspect all rim parts for damage.

DANGER! Always replace damaged or badly worn tires. When replacing tires, always use a replacement of exactly the same diameter. Destroy old tires, so that they cannot be used. Using badly worn or damaged tires can result in serious injury or death.

- Replace damaged parts.

DANGER! Always replace rim parts that are bent, badly rusted, pitted from corrosion, cracked, worn, or damaged. Destroy old rim parts, so they cannot be used. Using damaged rim parts can result in serious injury or death. Do not mix parts from one rim with parts from another rim. Always use replacement parts that you can positively identify as the CORRECT replacement parts. All replacement rim parts MUST match the replacement part numbers stamped on the rim parts. Rims with different part numbers cannot be interchanged. If in doubt about sizing, DO NOT reassemble the rim. Contact the rim manufacturer for more information.

CAUTION!

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3. Clean and repaint rim parts as necessary.

NOTE: Remove rust, dirt, and foreign material from rim parts. Repainting the rim parts and bare metal areas will make them last longer. Be careful to keep paint out of the lock ring groove in the gutter when repainting rim parts.

4. Visually inspect all tire and rim parts to make sure they are positioned properly.

STARTING TO INFLATE THE TIRE

DANGER! Always replace rim parts that are bent, badly rusted, pitted from corrosion, cracked, worn, or dam-aged. Destroy old rim parts, so they cannot be used. Using damaged rim parts can result in serious injury or death. Do not mix parts from one rim with parts from another rim. Always use replacement parts that you can positively identify as the CORRECT replacement parts. All replacement rim parts MUST match the replacement part numbers stamped on the rim parts. Rims with different part num-bers cannot be interchanged. If in doubt about sizing, DO NOT reassemble the rim. Contact the rim manufacturer for more information.

2. 1. To comply with OSHA Regulation #29CFR1910.177, place the tire in a safety cage or other restrain-ing device before inflating the tire. Use a clip-on air chuck and hose that is long enough to allow you to stand outside the wheel trajectory. The air line must be equipped with an in-line valve with pressure gauge or regulator that can be preset. Use AME Intl. Truck Tire Inflator Model 11365.

WARNING!

Never hammer, strike, or pry an inflated or partly inflated tire/rim assembly. If you must seat a part or correct a problem, always deflate the tire first.

Do not use a steel hammer on rim or rim parts. This can damage the rim. If you must reposition tire or rim parts, use a rubber, plastic, or brass-faced hammer.

If a tire/rim assembly does not slide over a cast spoke wheel: Do not force the assembly by hammering. Instead, deflate the tire and inspect for warped or incorrectly seated parts, such as lock rings.

5. If tire and rim parts are seated properly proceed to “Finishing the Tire Inflation” below.

Finishing the Tire Inflation

1. Inflate the tire to 20 psi [1,38 bar].
2. Check the tire bead for proper seating.
3. Continue inflating the tire to 40 psi [2,76 bar]. If the tire bead is not fully seated, see the Warning below. If the tire bead is fully seated, continue with Step 4 below.

WARNING!

Never inflate a tire beyond 40 psi [2,76 bar] to seat a tire bead. If the tire bead is not fully seated at 40 psi [2,76 bar]: Stop! Deflate the tire and correct the problem.

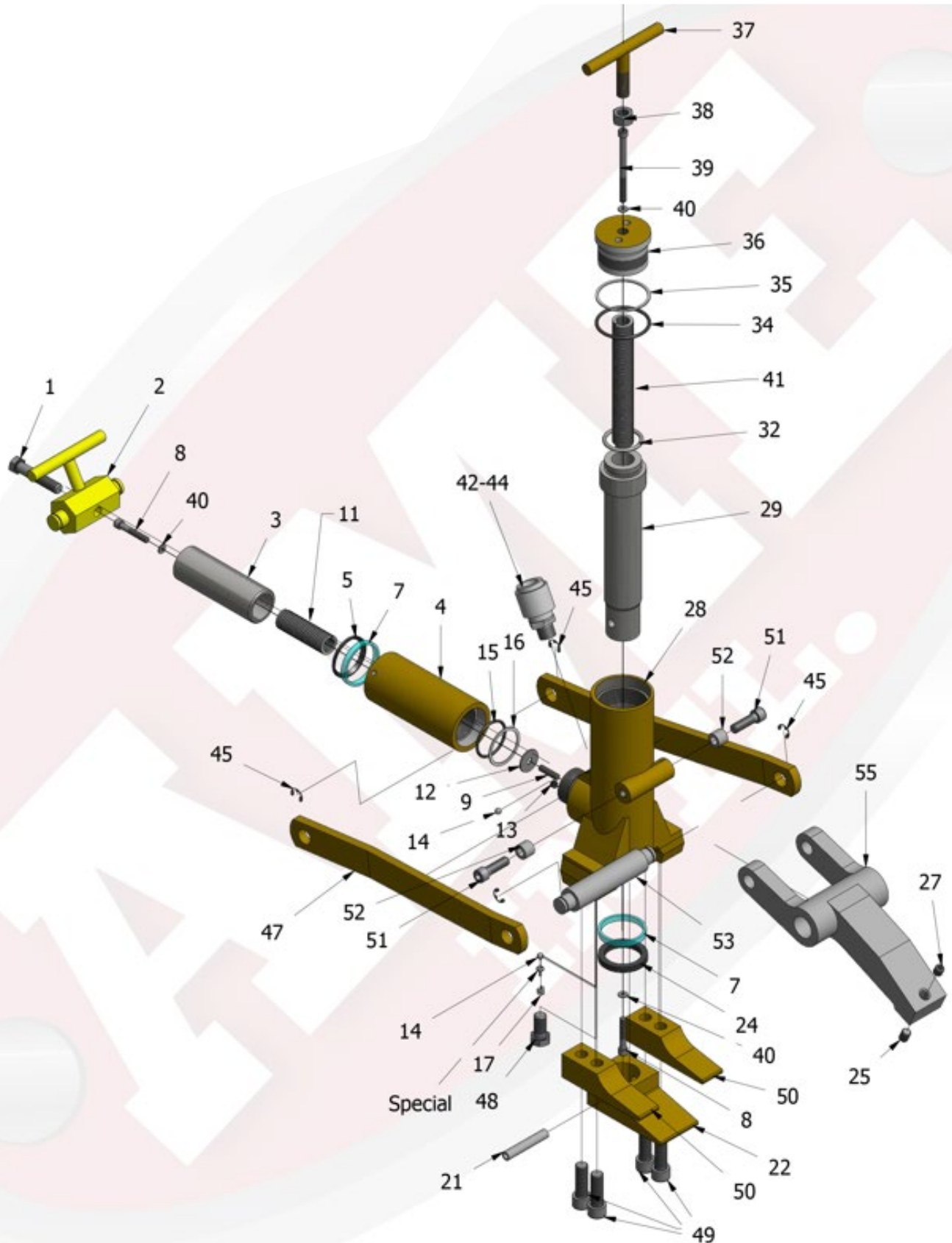
4. Once you see that the tire bead is fully seated at 40 psi [2,76 bar], deflate the tire completely
5. Reinflate the tire slowly to the manufacturer's recommended pressure.

DANGER!

Inflate and load tires only to manufacturer's specifications. Over-inflating and overloading tires can result in serious injury or death.

Never run a vehicle with only one tire of a dual assembly. Doing so can result in a collapse of the vehicle, leading to possible serious injury or death.

Parts Breakdown



Parts Breakdown

ITEM	PRODUCT NO.	DESCRIPTION	QTY
1	11010-001	SCREW, HEX HD. CAP (7/16-14 X 2); TORQUE TO 30/40 FT.LBS	1
2	11010-002	HANDLE, STRAP PIVOT	1
3	11010-003	PISTON, (SINGLE JAW)	1
4	11010-004	BODY, CYLINDER (SINGLE JAW); TORQUE TO 125/140 FT.LBS	1
5	11010-005	ROD WIPER	1
7	11010-007	U-CUP	2
8	11000-008	SCREW, SOC HD (1/4-20 X 1-1/4), TORQUE TO 215/140 FT.LBS	2
9	11010-009	SCREW, SET (1/4-20 X 1)	1
11	11010-011	SPRING, (.83 OD X .13 WS)	1
12	11010-012	WASHER, SPECIAL (1.00 X .26)	1
13	11010-013	SPRING, (.36 OD X .50 X .05 WS)	1
14	11010-014	BALL, (1/4 IN. DIAMETER, STEEL)	2
15	11010-015	O RING, (1.62 X 1.37 NITRILE)	1
16	11010-016	WASHER, BACKUP (2.00 X 1.75)	1
17	11010-017	SPRING, (.32 OD X 1.20 X .08 WS)	1
21	11010-021	PIN, ROLL (.38 X 2.25)	1
22	11020-022S	CLAW, MACHINING	1
24	11010-024	WIPER, ROD (2.00 X 1.50 URE)	1
25	11010-025	SCREW, SET (3/8-16 X 3/8)	1
27	11010-027	SCREW, SET (3/8-16 X 1/2)	1
28	11010-028	BODY, BEAD BREAKER	1
29	11010-029	PISTON, CYLINDER	1
32	11010-032	RING, RETAINER (INTERNAL 1/31 ID)	1
34	11010-034	O RING (2.00 X 1.75)	1
35	11010-035	WASHER, BACKUP (2.00 X 1.75)	1
36	11010-036	PLUG, END (TORQUE TO 14/225 FT.LBS)	1
37	11010-037	HANDLE	1
38	11010-038	NUT, HEX JAM (1/2-13)	1
39	11000-039	SCREW, SOC HD (1/4-20 X 2-1/2, TORQUE TO 90/110 IN.LBS)	1
40	11000-040	WASHER, COPPER (.37 X .25)	3
41	11010-041	SPRING, (.83 OD X 5.00 X .13 WS)	1
45	11010-045	RING, RETAINER EXTERNAL	4
47	11010-047	STRAP	2
48	11010-048	SCREW, CAP (9/16-18 X 1-1/8)	1
49	11010-049	SCREW, SOC. HD. (1/2-13 X 1-1/4)	4
50	11020-050	TOOTH, REPLACEABLE	2
51	11010-051	SCREW, SOC. HD. (3/8 X 16 X 1)	2
52	11010-052	SPACER	2
53	11010-053	PIN	1
55	11020-055	JAW, SINGLE	1
42-44	16060	FLUID LINE ATTACHMENT	1
Special	11010-060	BALL CAP : OPTIONAL	1