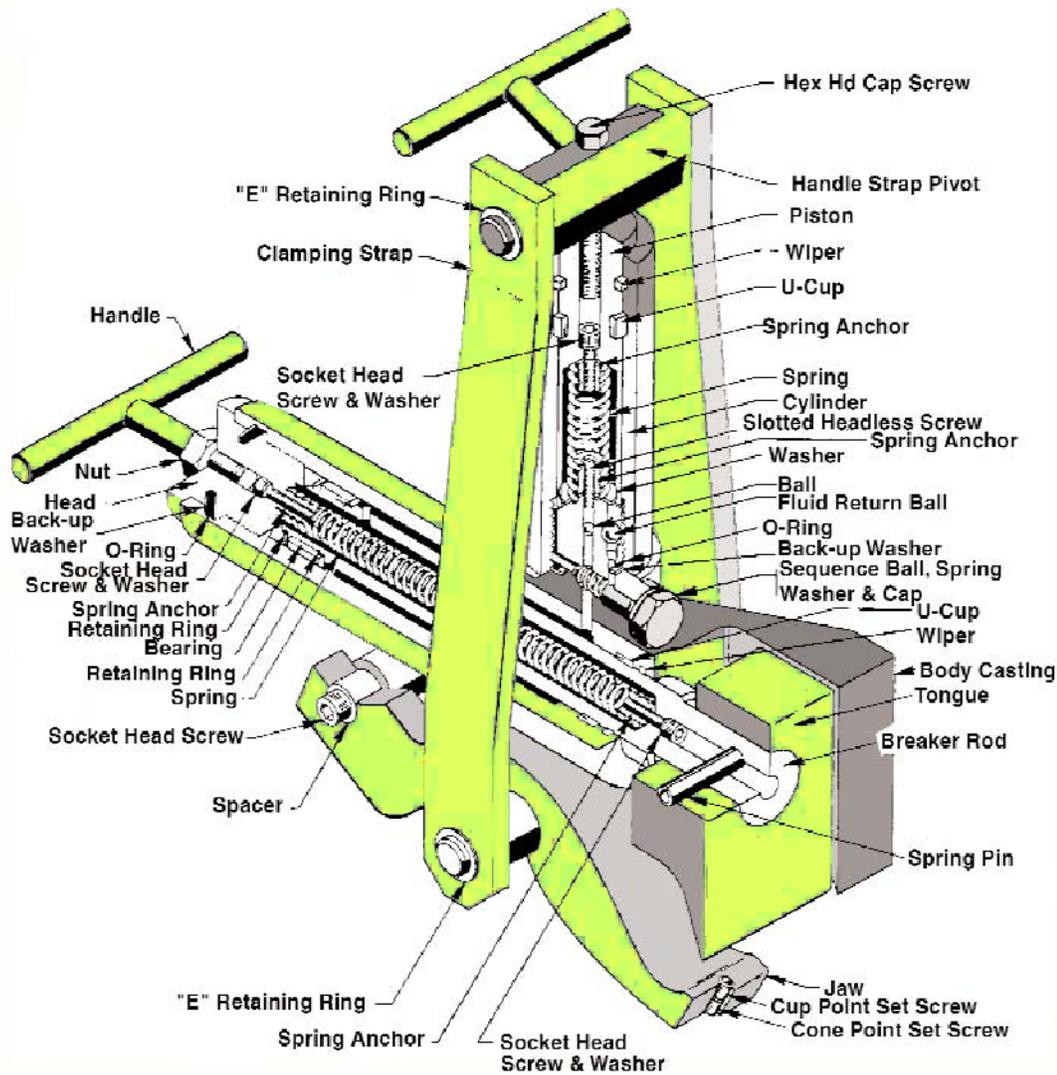




Cut Away

Tire Bead Breaker Model 10101



DESCRIPTION	PART NUMBER
Hex Hd Cap Screw 7/16-14 x 2	12901
Handle Strap Pivot	36949
Piston	350455
Wiper	16720
U-Cup	16721
Spring Anchor	201360
Spring EXT OD.830ID.533R48L1.9300T	201430
Cylinder	350456
Slotted Headless Strew 1/4 –20 x 1.00 Knurled Cup	11116
Spring Anchor	201360
Washer	17160
Ball	12223
Fluid Return Ball	10375
O-Ring	11841
Back-up Washer	206751
Sequence Ball, (Spring)	10375 (16724)
Washer & (Cap)	10261 (21599)
Wiper	250918
Body Casting (Replaceable Tooth)	306135
Tongue (Claw)	36853
Breaker Rod	420439
Spring Pin	10613
Jaw	420438
Cup Point Set Screw	BC3806027B
Cone Point Set Screw	DA1132027
Socket Head Washer	10442
Socket Head Screw 1/4-20 x 1.25	10020
Spring Anchor	201360
"E" Retaining Clip	11901
Spacer	204238
Socket Head Screw	B1069028
Spring EXT OD.830ID.533R17L5.125MW	202625
Retaining Ring	201433
Bearing	204236
Retaining Ring	204237
Spring Anchor	201360
Socket Head Screw & Washer	16064
O-Ring	10294
Washer	10442
Back-up	20675
Head	64250
Nut	10391
Socket Head Screw	10020
Socket Head Washer	10442
Handle	202636
Clamping Strap	DA10489217
"E" Retaining Ring	11901

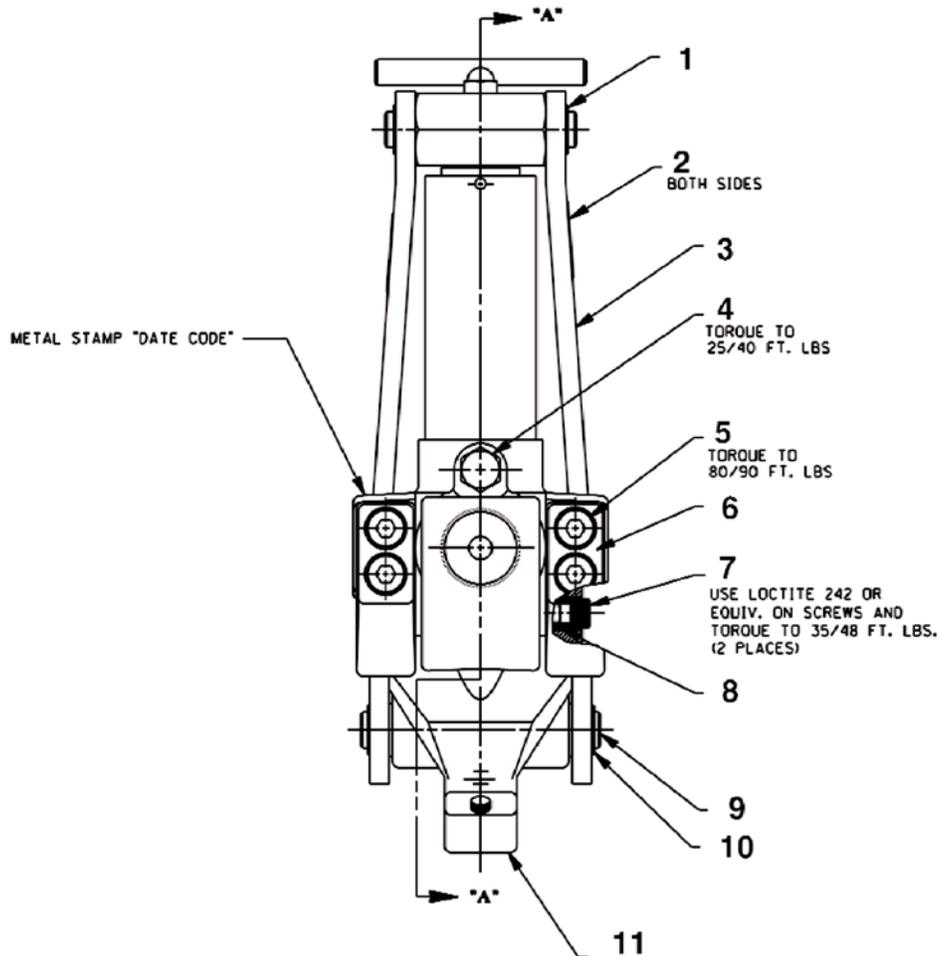




Parts List For

Tire Bead Breaker Model 10101

*NOTE – Identifying feature 5 digit number cast on clamp Item# 11



Item No.	No. Req'd	Part No.	Description
----------	-----------	----------	-------------

1	2	11901	Ring, Retainer External
2	2	260095	Decal, Warning
3	2	DA10489217	Strap
4	1	21599	Screw, Cap (9/16-18 x 1 -1/8)
5	4	10081	Screw, Soc Hd (1/2-13 x 1-1/4)
6	2	306135	Tooth, Replaceable
7	2	B1069028	Screw, Soc Hd (3/8-16 x 1)
8	2	204238	Spacer
9	1	DA10488061L	Pin
10	2	11901	Ring, Retainer External
*11	1	420438	Jaw, Single

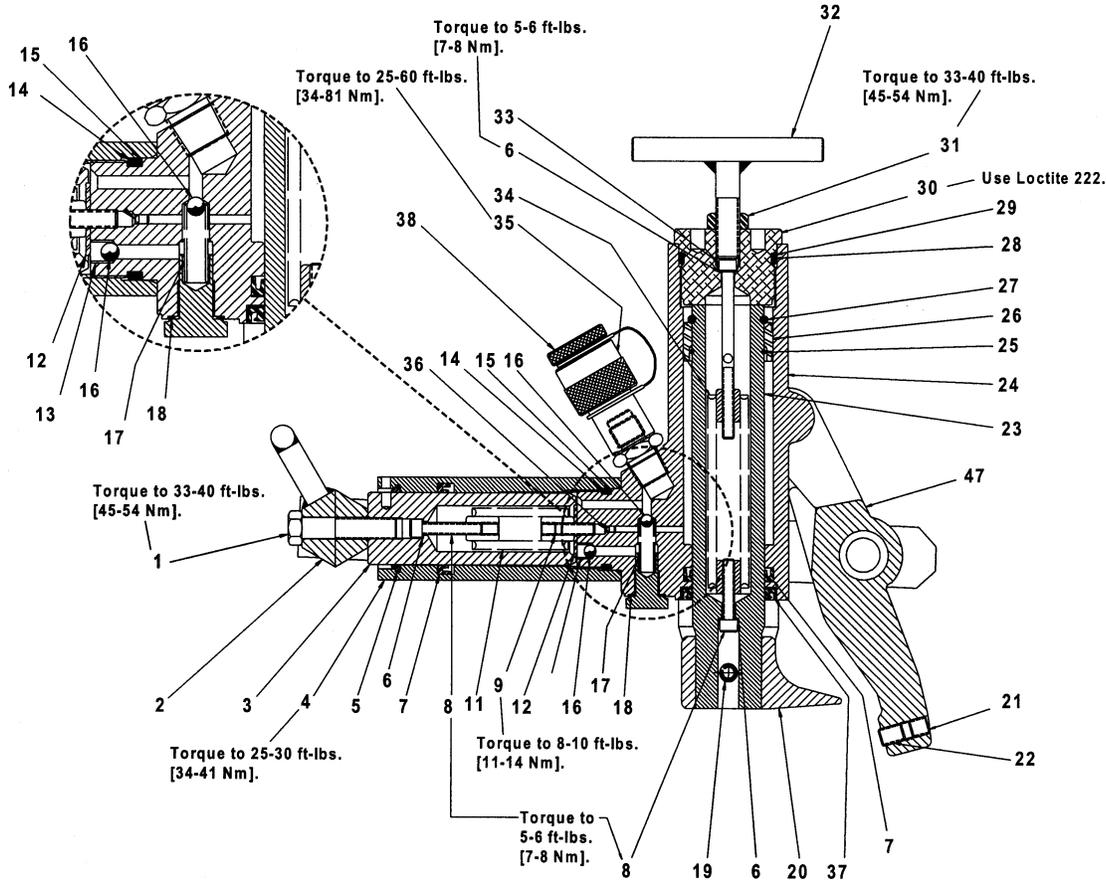




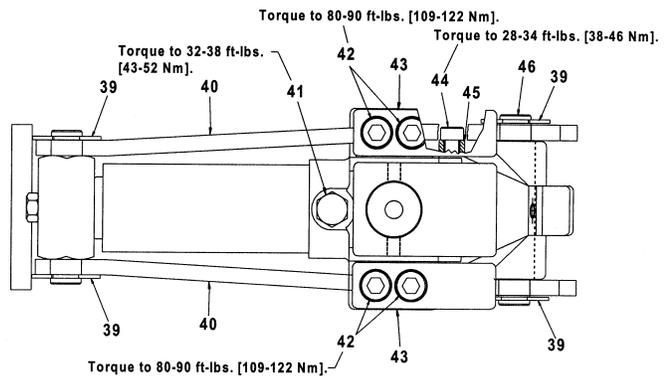
Repair Parts Sheet

BBH-40 (Model 10101) Tire Bead Breaker

*NOTE – Identifying feature DA Number cast on clamp Item# 47.



NOTE: Use Loctite 242 on items 1, 21, 22, and 32.



CAUTION

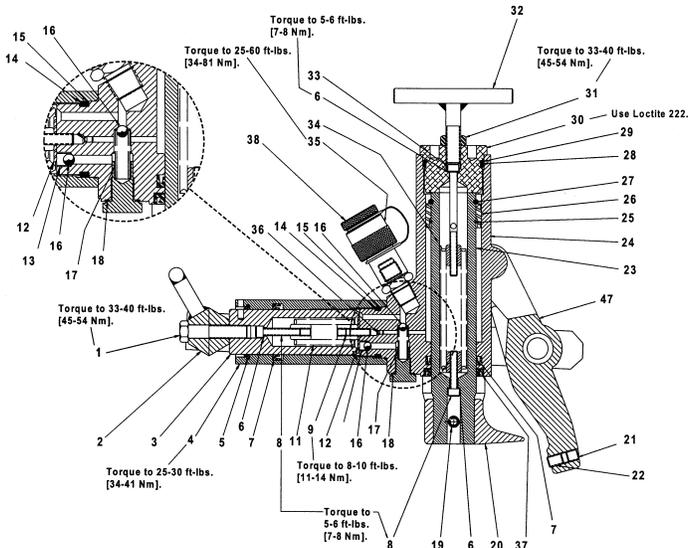
The BBH-40 Bead Breaker, and all tire tools, should be used only by persons properly trained according to OSHA regulation #29CFR1910.177, "Servicing Single-Piece & Multi-Piece Wheels."



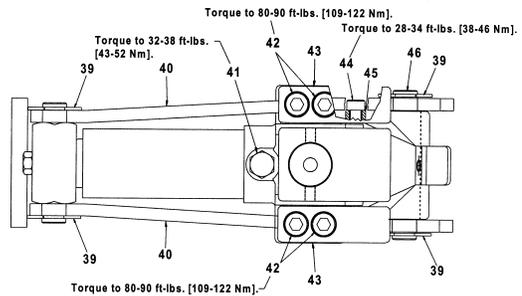
REPAIR PARTS LIST

ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	B1564046 (SEE 10291)	1	CAP SCREW	25	DA10506149 (SEE 204237)	1	RETAINING RING
2	DA10487070 (SEE 36949)	1	STRAP PIVOT	26	DA10490155 (SEE 204236)	1	BEARING
3	DA10486051	1	PISTON	27	DA10509149 (SEE 201433)	1	RETAINING RING
4	DA10485030	1	CYLINDER	28	*B1090503 (SEE 10294)	1	O-RING
5	*DA10507776 (SEE 16720)	1	ROD WIPER	29	*B1224564 (SEE 206750)	1	BACK UP
6	*DA10493167 (SEE 10442)	3	COOPER WASHER	30	DA10477020	1	SPRING HANDLE CAP
7	*DA10502041 (SEE 16721)	2	DISOGRIN U-CUP	31	B1009123 (SEE 10391)	1	JAM NUT
8	B1013028 (SEE 10020)	2	SOCKET HEAD CAPSCREW	32	DA104181070 (SEE 202636)	1	SPRING RETURN ASSEMBLY
9	BC2516027A	1	SET SCREW	33	DA10496028 (SEE 16064)	1	CAP SCREW
11	DA10330900 (SEE 201430)	1	SPRING RETURN ASSEMBLY	34	DA10503776 (SEE 250918)	1	SPRING RETURN ASSEMBLY
12	DA10494167	1	STEEL WASHER	35	10606	1	FEMALE COUPLER
13	*DA10492110	1	COMPRESSION SPRING	36	F100009-59	1	EXPANDER RING
14	*B1026503 (SEE 11841)	1	O-RING	37	*DA10503776	1	METAL CAP ASSEMBLY
15	*B1221564 (SEE 206751)	1	BACK-UP	38	DA4338900 (SEE 9797)	1	DUST CAP ASSEMBLY
16	*B1007016 (SEE 10375)	2	¼" DIA. BALL	39	DA10508349 (SEE 11901)	4	SNAP RING
17	*DA10279110 (SEE 16724)	1	COMPRESSION RING	40	350270	2	SIDE STRAP
18	*DA10495167 (SEE 10261)	1	COPPER WASHER	41	DA10482020	1	CAP
19	B1171057 (SEE 10613)	1	ROLL PIN	42	B1139028	4	SOCKET HEAD CAPSCREW
20	DA10491002 (SEE 36853)	1	CLAW AMCHINE	43	DA10504800 (SEE 306135)	2	REPLACEMENT TOOTH
21	BC3806027B	1	SET SCREW	44	B1069028	2	SOCKET HEAD CAPSCREW
22	DA11382027	1	SET SCREW	45	DA10500039 (SEE 204238)	2	BUSHING
23	DA10480107	1	RAM PISTON	46	DA10488061	1	HANDLE PIN
24	DA10478001 (N/A)	1	BODY	47	DA10484639 (SEE 420438)	1	JAW CLAMP

* Indicates parts available in Repair Kit 10701



NOTE: Use Loctite 242 on items 1, 21, 22, and 32.

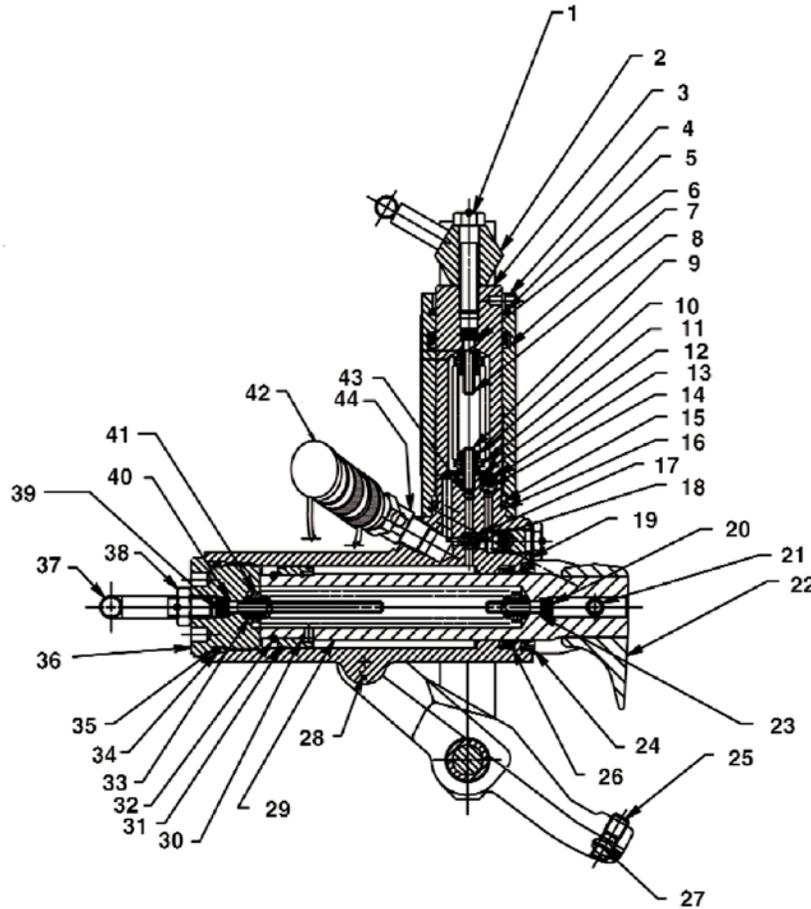




Parts List For

Tire Bead Breaker

Model 10101



Item No.	Part No.	No. Req'd	Description
1	12901	1	Screw, Hex Hd Cap (7/16-14 x 2) Torque to 30/40 Ft. Lbs
2	36949	1	Handle, Strap Pivot
3	350455	1	Piston, (Single Jaw)
4	350456	1	Body, Cylinder (Single Jaw; Torque to 125/140 Ft. Lbs.)
5	16720	1	Rod Wiper
6	10442	1	Washer, Copper
7	16721	1	U-cup
8	10020	1	Screw, Soc Hd (1/4-20 x 1-1/4; Torque to 90/110 in. Lbs.
9	11116 (SEE BC2516027A)	1	Screw, Set (1/4-20 x 1)
10	201360	1	Spring, Retainer
11	201430	1	Spring, (.83 OD x 1.90 x .13 WS)
12	17160 (SEE DA10494167)	1	Washer, Special (1.00 x .26)
13	13944 (SEE DA10492110)	1	Spring, (.36 OD x .50 x .05 WS)
14	10375	1	Ball, (1/4 in. Dia. Steel)



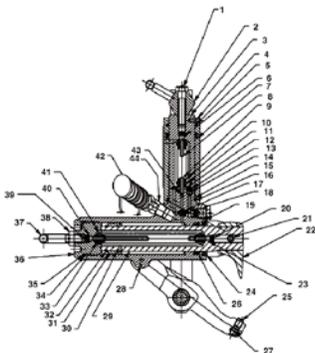


Parts List For

Tire Bead Breaker Model 10101

Rev. 0805

Item No.	Part No.	No. Req'd	Description
15	11841	1	O Ring, (1.62 x 1.37 Nitrile)
16	206751	1	Washer, Backup (2.00 x 1.75)
17	16724	1	Spring, (.32 OD x 1.20 x .08 WS)
18	10375	1	Ball, (1/4" Dia. Steel)
19	10261	1	Washer, Copper (.75 x .60)
20	10020	1	Screw, Soc Hd (1/4-20 x 1-1/4; Torque to 90/110 in. Lbs.)
21	10613	1	Pin, Roll (.38 x 2.25)
22	36853	1	Claw, Machining
23	10442	1	Washer, Copper
24	250918	1	Wiper, Rod (2.00 x 1.50 URE)
25	BC380627B	1	Screw, Set (3/8-16 x 1/2)
26	16721	1	U-cup
27	DA11382027	1	Screw, Set (3/8-16 x 3/8)
28	64250	1	Body, Beak Breaker
29	420439	1	Piston, Cylinder
30	204237	1	Ring, Retainer (internal 141 ID)
31	204236	1	Bearing
32	201433	1	Ring, Retainer (internal 1/31 ID)
33	201360	1	Spring, Retainer
34	10294	1	O Ring, (2.00 x 1.75 Nitrile)
35	206750	1	Washer, Backup (2.00 x 1.75)
36	F100009-59	1	Plug, End (Torque to 140/225 Ft. Lbs.)
37	202636	1	Handle
38	10391	1	Nut, Hex Jam (1/2-13)
39	16064	1	Screw, Soc Hd (1/4-20 x 3-1/2; Torque to 90/110 in. Lbs.)
40	10442	1	Washer, Copper (.37 x .25)
41	202625	1	Spring, (.83 OD x 5.00 x .13 WS)
42	10606	1	Ram Half Cplr/plastic dust cap
43	12223	1	Ball, (3/16" Dia. Steel)
44	10622	1	Fitting, Elbow 45 Deg (3/8 NPTF)





EQUIPMENT SUPPLY COMPANY

Instruction Sheet

10101 Tire Bead Breaker

L2190

Rev. O

10/97

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.

CONTENTS

ENGLISH.....	1-6	FRANÇAIS	13-18	ITALIANO.....	25-30
DEUTSCH.....	7-12	ESPAÑOL	19-24	NEDERLANDS	31-36

DESCRIPTION

The BBH-40 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 BBH-40 can be used with a model AHP15T (10500), AHP25TP (10502), AHP35T (10504), 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 ESCO at 1-800-352-9852. If you are outside the U.S., contact your local government officials.
4. ESCO 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 ESCO when in doubt about safety precautions or applications.

CAUTION

The bead breaker, and all tire tools, should be used only by persons properly trained according to OSHA Regulation #29CFR1910.177, "Servicing Single-Piece & Multi-Piece Wheels." Free copies of this regulation are available upon request from ESCO.

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.

OPERATING INSTRUCTIONS

REMOVING THE WHEEL

1. Chock the wheels opposite 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 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 a dual mounting.

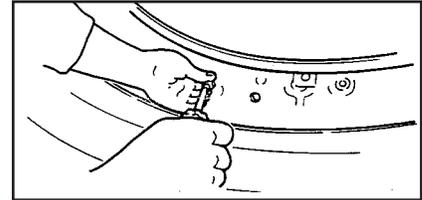


Figure 1

⚠ DANGER

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.

- 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.

USING THE BBH-40 BEAD BREAKER

Positioning the Bead Breaker

Position the bead breaker, so that the wedge-shaped teeth will grab evenly under the rim flange when the clamping jaw tightens. (See Fig. 2.)

NOTE: Make sure the bead breaker is about 30°, or at least 12 inches [0,3 m], to one side of the flange butt weld.

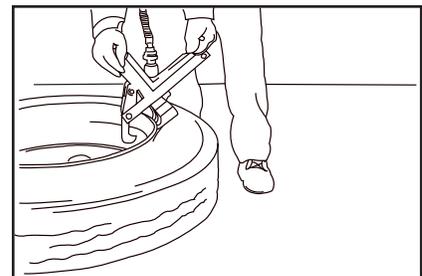


Figure 2

Activating the Bead Breaker

⚠ 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.

1. 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 flange.

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.)

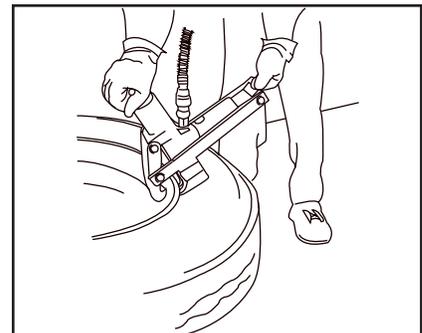


Figure 3

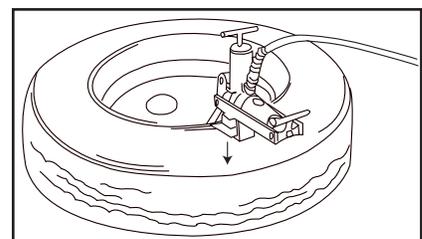


Figure 4

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.)

⚠ 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.

5. 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”** below.

Continuing to Break the Tire Bead

1. Move the bead breaker 8-12 inches [0,2-0,3 m] from its current position.
2. Repeat steps, starting with **“Positioning the Bead Breaker”**, until the rim is completely separated from the tire bead.

Breaking the Bead on the Other Side

1. Turn the tire over on the other side.
2. Repeat all steps, starting with **“Positioning the Tire Bead”** on page 2.

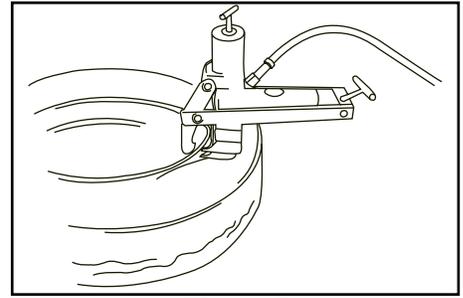


Figure 5

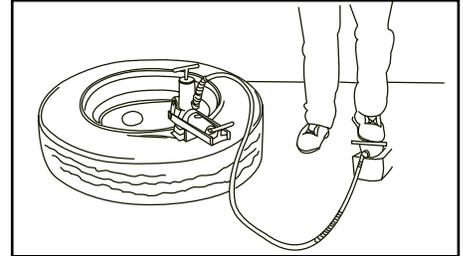


Figure 6

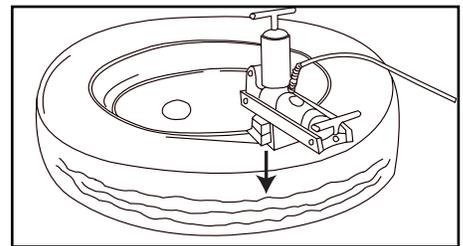


Figure 7

MOUNTING AND INFLATION

Jacking Up the Vehicle

1. Chock the wheels opposite 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.

Inspecting the Tire and Rim

▲ 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.

1. Inspect all rim parts for damage.

▲ 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.

2. Replace damaged parts.

▲ DANGER

Never weld on an inflated or partially inflated tire/rim assembly. Welding on an inflated tire/rim assembly can cause an explosion and serious injury or death.

Do not rework, weld, heat, or braze any rim parts for any reason. Reworking and welding damaged parts can result in serious injury or death.

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

1. To comply with OSHA Regulation #29CFR1910.177, place the tire in a safety cage or other restraining 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 ESCO Truck Tire Inflator Model 15136.

▲ DANGER

Always use a safety cage or restraining device when inflating a tire. Not using a safety cage or restraining device can result in serious injury or death.

Always use a clip-on air chuck and a 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 a pressure gauge or a regulator that can be preset.

Never use starting fluid, ether, gasoline, or any other flammable material to lubricate, seal, or seat the bead of a tubeless tire. Doing so can cause an explosion and serious injury or death.

2. Inflate the tire to 5 psi [0,345 bar].
3. Check all tire and rim parts again for proper positioning.
4. If tire/rim parts are not seated properly, deflate the tire and correct the problem before proceeding.

⚠ 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.

⚠ CAUTION

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.