

# **PARTS MANUAL**

## ***BALE KING***

## ***VORTEX 2010***



# **BRIDGEVIEW**

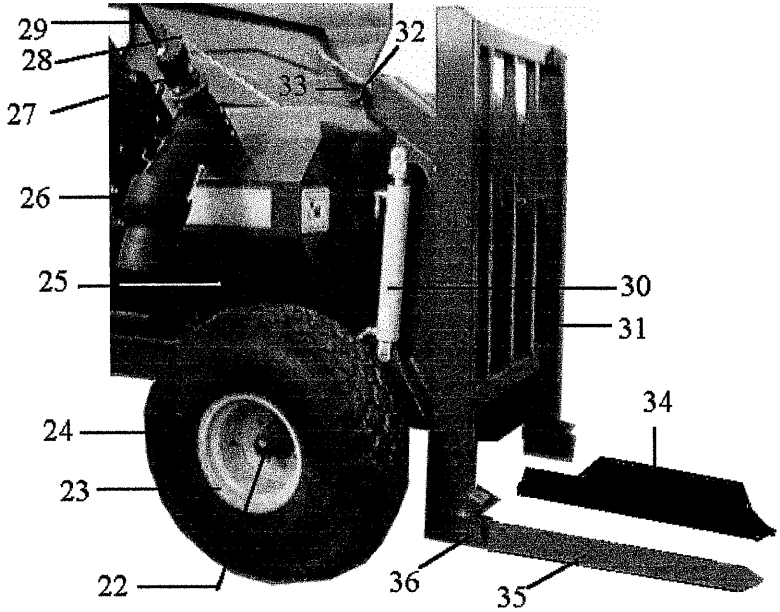
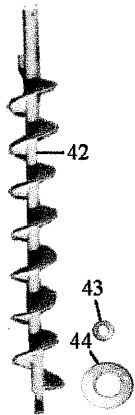
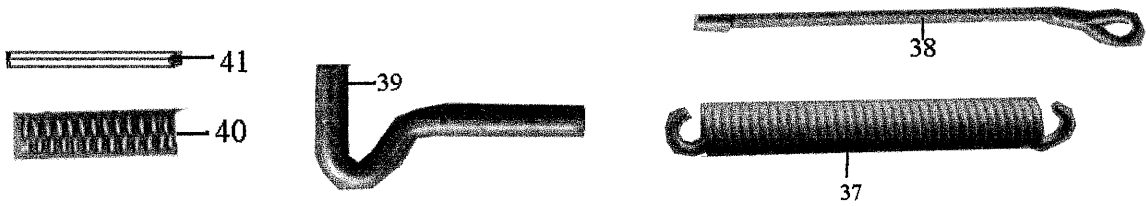
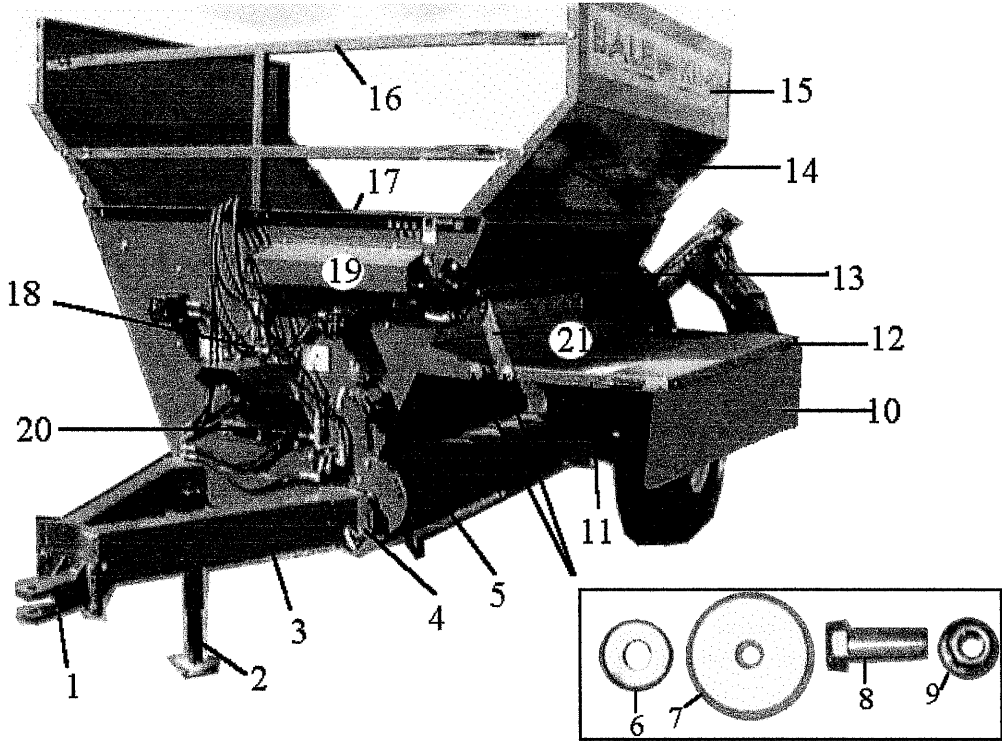
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# **TABLE OF CONTENTS**

## **BMI BALE KING VORTEX 2010**

<b>EXTERNAL PARTS AND CONTROLS</b>	<b>PAGE 1- 3</b>
<b>STANDARD HUB ASSEMBLY</b>	<b>PAGE 4</b>
<b>INNER TUB PARTS</b>	<b>PAGE 5 - 6</b>
<b>HYDRAULIC PARTS AND COMPONENTS</b>	<b>PAGE 7 - 9</b>
<b>HYDRAULIC CYLINDER</b>	<b>PAGE 10</b>
<b>PTO PARTS</b>	<b>PAGE 11 - 12</b>
<b>OPTIONAL PARTS</b>	<b>PAGE 13 - 14</b>

# EXTERNAL PARTS & CONTROLS



# EXTERNAL PARTS & CONTROLS

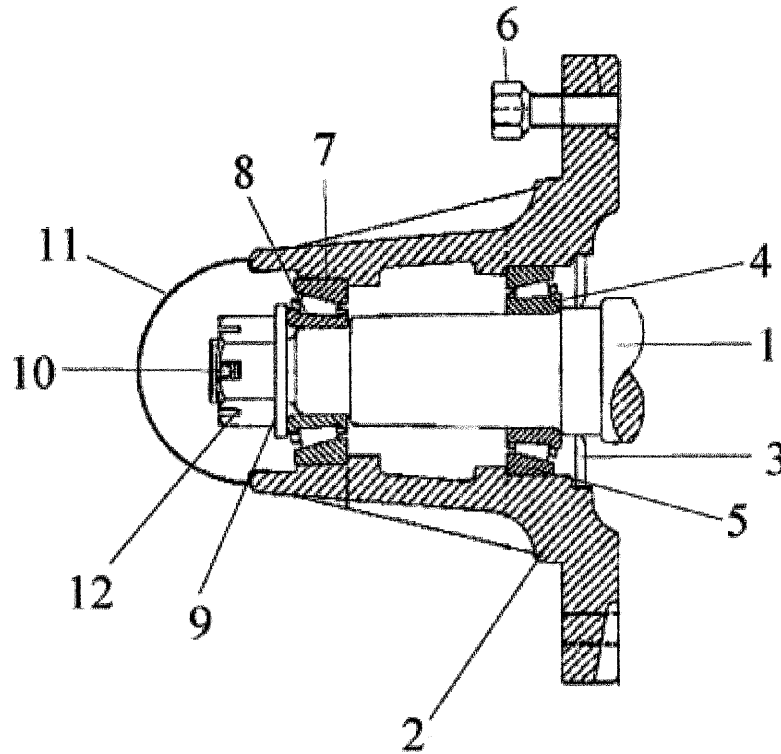
<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>QTY</u>
1	10281	Adjustable Hitch Assembly	1
2	10285	Implement Jack	1
3	10336	Main 2010 frame (made to order)	1
4	10236	Bottom Deflector Attachment includes 39,40,41	1
Not shown	10175	1/2x 1 1/4 NC Bolt	4
Not shown	10273	1/2 Serrated Nut	4
5	10296	Adjustor, hoop height includes 39,40,41	1
Not shown	10297	Flat Rubber Grip	1
6	10239	Bushing for deflector pivot 1/2 x 1 1/4	6
7	10238	Fender Washer	6
8	10174	1/2 x 1 1/2 NC Bolt	6
9	10273	1/2 Serrated Nut	6
10	10351	1/4"x 24" x 80" Rubber Deflector	1
11	10257	Side Deflector	1
Not shown	10290	Round Rubber Grip 3/4" (black)	1
12	10288	Support channel for rubber	1
Not shown	10253	3/8 x 1 1/4 NC Bolt	8
Not Shown	10289	3/8 NC Locknut	8
13	10291	Lift Assembly for Side Deflector includes 39,40,41	1
Not shown	10292	Nylon Bearing	1
Not shown	10293	Roll Pin 1/4 x 2 1/2	1
Not shown	10175	1/2 x 1 1/4 NC Bolt	4
Not shown	10273	1/2 Serrated NC Nut	4
14	10256	Top Bale shield	2
Not Shown	10174	1/2 x 1 1/2 NC Bolt	8
Not Shown	10273	1/2 Serrated Nut	8
15	10352	Model 2010 Decal Kit	1
Not shown	10182	Safety Decal Set	1
16	10294	Front Rack	1
Not shown	10353	1/2 x 3 1/2 NC bolt	4
Not shown	10273	1/2 Serrated Nut	4
17	10295	Tub Assembly	1
18	10269	PTO & Hose Support	1
Not shown	10306	Hydraulic hose Clamp	1
Not shown	10271	3/8 Serrated Nut	1
19	10299	Spring Guard	1
Not shown	10300	3/8 x 1 NC Bolt	4
Not Shown	10271	3/8 Serrated Nut	4
20	10298	Front Bearing plate (Rotor)	1
Not shown	10175	1/2 x 1 1/4 NC Bolt	8
Not shown	10273	1/2 Serrated Nut	8
21	10245	Deflector Arm	2
22	-----	Hub assembly see elsewhere in manual	2
23	10354	W14C x 16.1 x 8 bolt rim	2

# EXTERNAL PARTS & CONTROLS

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>QTY</u>
24	10355	16.5L x 16.1 Non shid Tire 6 ply	2
25	10356	Grain Tank (40 Bushel Approx.)	1
26	10357	Flexible Down Spout	1
27	10248	Hydraulic Motor RS99030000	1
28	10358	Chain 30 links of 3/16 gr. 30	2
Not shown	10253	3/8 x 1 1/4 NC Bolt	4
Not shown	10271	3/8 Serrated nut	4
29	10359	Grain Tank Lid	1
Not shown	10297	flat Rubber Grip (black)	1
Not shown	10239	Pivot Bushing	2
Not shown	10238	Fender washer	2
Not shown	10174	1/2 x 1 1/2 NC Bolt	2
Not shown	10273	1/2 Serrated Nut	2
30	10262	Hydraulic Cylinder see parts elsewhere in manual	2
31	10360	Rear fork Assembly	1
32	10361	Pivot Pipe	1
Not shown	10362	1/2 x 3 3/4 NC Bolt	1
Not shown	10241	1/2 NC Locknut	1
Not shown	10280	Grease Zerk 1/4" 28THD	2
33	10244	End Cap (black plastic)	2
34	10234	Optional Small Tine	2
35	10303	Bale Tine 3 x 3	2
36	10031	Headed Pin (tine to fork)	2
Not shown	10178	Cotter Pin	2
37	10246	Spring Lift Assist for deflector	1
Not shown	10363	Eyebolt 5/8 x 5 1/4	1
Not shown	10364	5/8 NC Locknut	1
38	10230	Cable for deflector lift assist	1
39	10231	Plated Handle	3
40	10301	Compression Spring	3
41	10302	Roll Pin 3/16 x 1 1/4	3
42	10365	Auger Assembly	1
Not shown	10279	3/8 x 2 NC Bolt connects motor to auger	1
Not shown	10289	3/8 NC Locknut	1
43	10366	Bearing Assembly w/collar 3/4"	1
Not shown	10367	Lock collar 3/4"	1
44	10368	Bearing Flange 3 hole	2

# STANDARD HUB ASSEMBLY

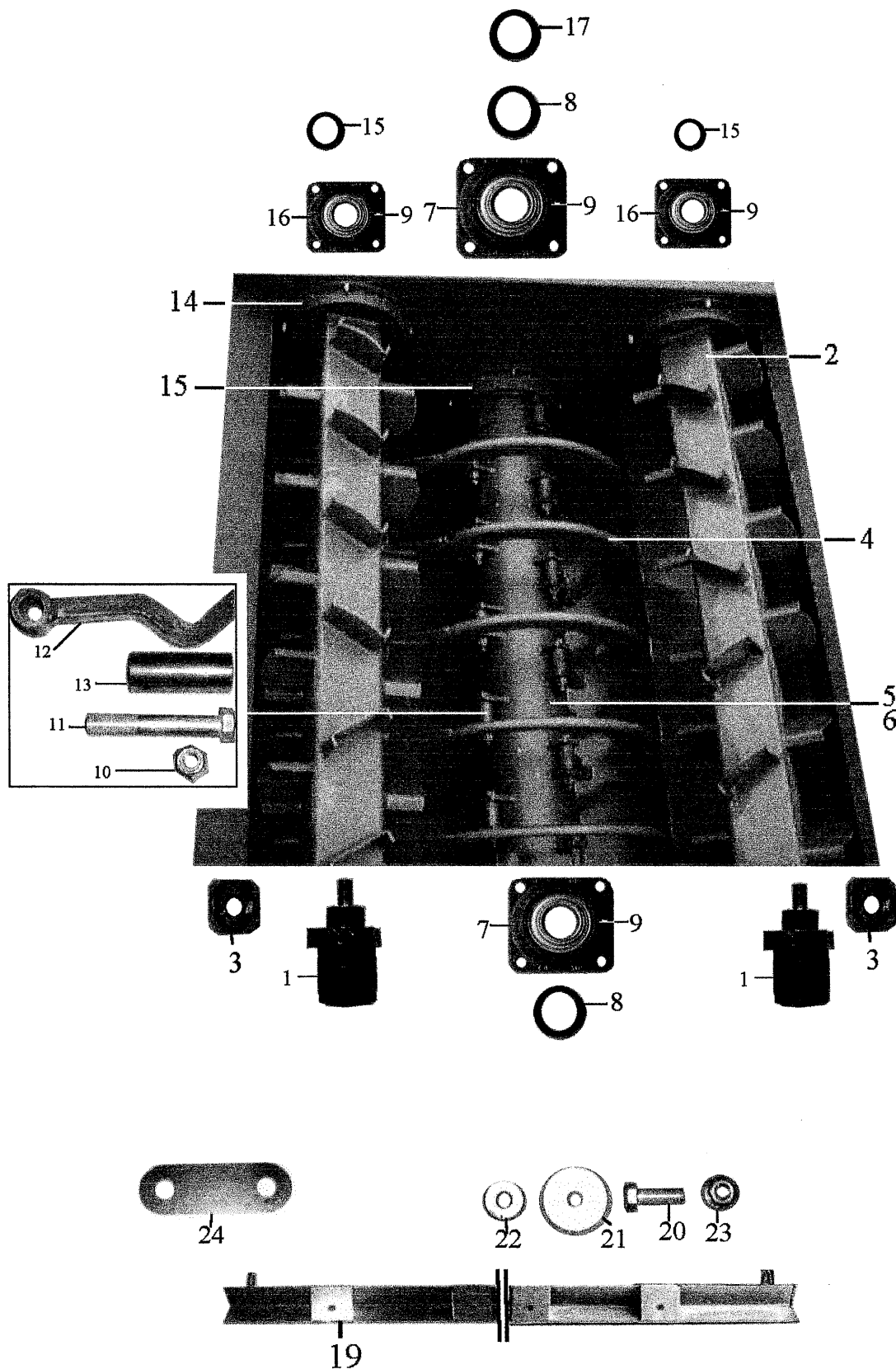
## 8 BOLT HUB W/ 2.25" SPINDLE



### HUB PARTS LIST

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>QTY</u>
1	10342	Spindle 2.25"x 15.5"	2
2	10343	Hub 6500 series	2
3	10344	Dirt Seal CR20148	2
4	10345	Inner Bearing Cone LM25590	2
5	10346	Inner Bearing Cup LM25821	2
6	10347	Wheel Stud 9/16 NF 1 3/4" Length	16
7	10348	Outer Bearing Cone LM25877	2
8	10349	Outer Bearing Cup LM25520	2
9	10071	Washer 1 1/16x2	2
10	10072	Cotter Pin 3/16x 1 1/2"	2
11	10350	Dust Cap D-6000	2
12	10153	Castle Nut 1" 14THD	2

# INNER TUB PARTS

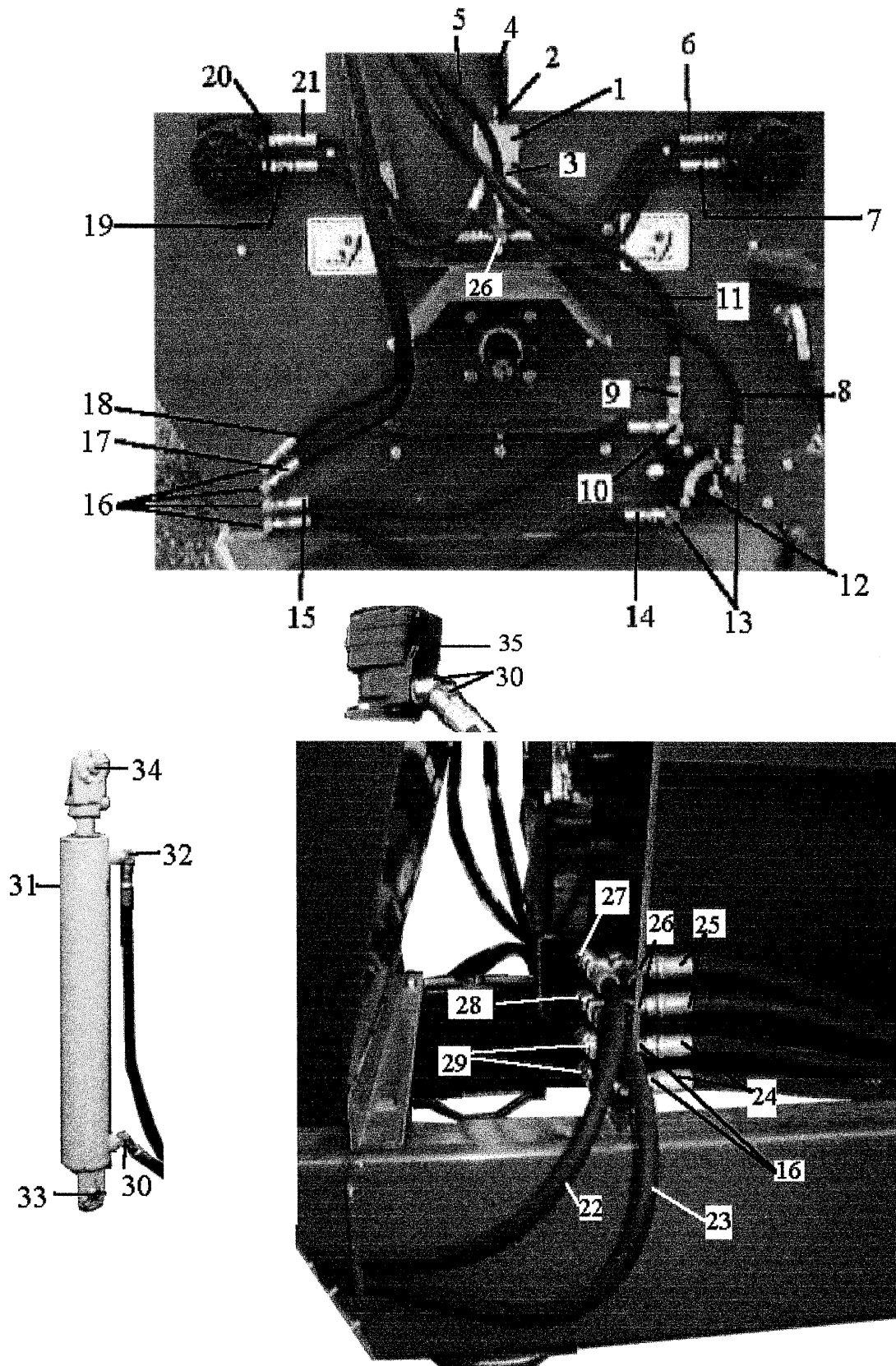


# INNER TUB PARTS

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>Qty</u>
1	10045	Hydraulic Motor Assembly OEM#RE32070500	2
Not shown	10172	Sockethead bolt 1/2 x 2 1/2 NC	8
Not shown	10273	1/2 Serrated NC Nut	8
2	10228	Beater Assembly	2
3	10021	Coupler Assembly	2
4	10226	Hoop Assembly w/bridge support	7
Not shown	10240	Bolt 1/2 x 1 1/4 NC	7
Not shown	10278	1/2 NC Locknut	7
Not shown	10271	3/8 Serrated NC Nut	7
Not shown	10279	3/8 x 2 NC Bolt	7
5	10260	Rotor Assembly (no flails)	1
6	10261	Rotor Assembly (with flails)	1
7	10221	Bearing w/block and lock collar RCJ1 15/16	2
Not shown	10274	Bolt 5/8 x 1 3/4 NF Gr.8	8
Not shown	10275	Nut 5/8 NF GR.8	8
Not shown	10276	Lockwasher 5/8	8
Not shown	10222	Bearing Insert 1 15/16 G1115KRRB	2
8	10268	Lock Collar 1 15/16 ELC 115	2
9	10270	Grease Zerk 1/8 NPT	4
10	10007	Nylon Locknut 3/4 NC	30
11	10006	Bolt 3/4 x 5 NC	30
12	10223	Flail 3/4x1 1/2 x 8 3/4(Must replace in pairs )	30
13	10005	Brass bushing for flail	30
14	10229	Twine Guard for Beater	4
Not shown	10253	3/8 x 1 1/4 NC Bolt Beater and Rotor guards	24
Not shown	10271	3/8 Serrated NC Nut	24
15	10272	Twine Guard for Rotor (See Above for Bolts)	2
16	10038	Bearing Assembly w/block & collar 1 3/4 PCJ 1 3/4	2
Not shown	10174	1/2 x 1 1/2 NC Bolt	8
Not shown	10273	1/2 Serrated NC Nut	8
Not shown	10043	Bearing Insert 1 3/4 GRA112NPPB	2
17	10040	Lock Collar 1 3/4 ELC 112	2
18	10227	Split Collar (back of Rotor)	1
19	10255	Hoop Support	1
20	10174	Bolt 1/2 x 1 1/2 NC	4
21	10238	1/2 Fender Washer	4
22	10239	1/2 x 1 1/4 Deflector Bushing	4
23	10273	Serrated NC Nut	4
24	10277	Shackle (Hoop support to Hoop Adjusting Lever)	2



# HYDRAULICS



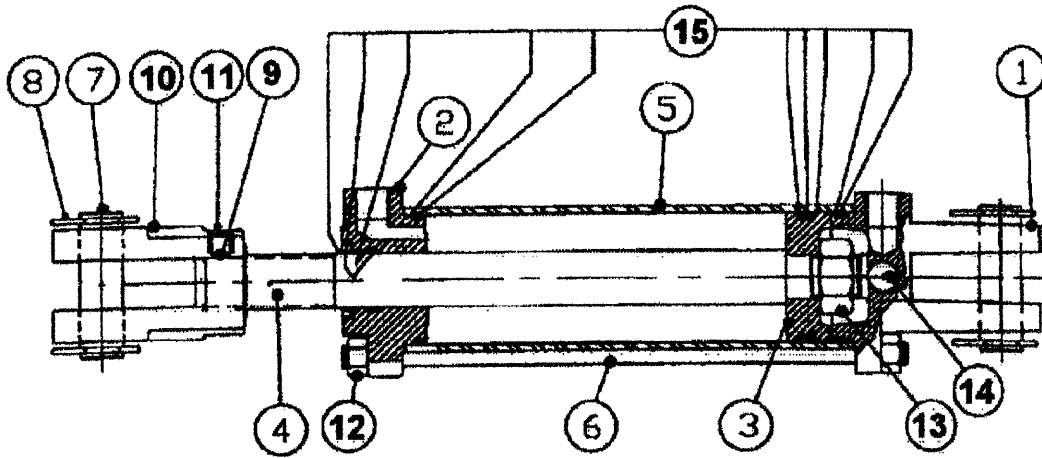
# HYDRAULIC PARTS LIST

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>QTY</u>
1	10046	Modular Control 50/50 flow divider FDC1-10-6T-88	1
2	10216	ORB Adaptor 45 degree 6MB-6MJ45	1
3	10325	ORB Adaptor 45 degree 6MB-8MJ45	2
4	10196	3/8"Hydr. Hose 102" Over All Length; tractor to splitter valve ends 8MP and 6 FJX	1
5	10196	3/8" Hydr. Hose 102" OverAll Length;B.H tee to Tractor; Ends 8MP-6FJX	1
6	10327	3/8" Hydr. Hose 20" Over All length;Left hand motor top port to splitter ends 8FJX-8FJX	1
7	10198	3/8" Hydr. Hose 18" Over All length;Left hand Motor bottom port to BH Tee 8FJX-6FJX	1
8	10329	3/8" Hydr. Hose 128" Over All Length; Tractor to In port on flow control; 8MP-8MP	1
9	10215	Check Valve 8MP-8FP Exhaust port on flow Control valve	1
10	10214	Tee 8MP-8FP-8FP exhaust port on flow control	1
11	10329	3/8" Hydr. Hose 128" over All Length ; tractor to Exhaust port on flow control	1
12	10217	Flow Control 1/2"ports w/relief valve CFQ-A-50-R	1
13	10332	Elbow Fitting 8MP-8FP90; flow control ports	2
14	10333	3/8"Hydr. Hose 34" Over All Length;flow control To bulkhead 90; ends 8MP-6FJX	1
15	10333	3/8"hydr. Hose 34" Over All Length; Flow Control To Bulkhead 90; ends 8MP-6FJX	1
16	10187	Bulkhead Fitting 6MJBH-6MJ90	4
17	10330	3/8"Hydr. Hose 130" Over All Length;tractor to Bulkhead fitting ends 8MP-6FJX	1
18	10330	3/8" Hydr. Hose 130" Over All Length; tractor to Bulkhead fitting ends 8MP-6FJX	1
19	10327	3/8"Hydr.Hose 20" Over All length; RH motor Bottom port to splitter valve 8FJX-8FJX	1
20	10161	Adaptor 10MB-8MJ	4
21	10198	3/8"Hydr. Hose 18" Over All Length;RH motor top Port to bulkhead tee	1
22	10331	3/8"Hydr. Hose 68" Over All Length;BH Tee to RH Top cylinder port ends 6FJX-6FJX	1
23	10334	3/8"Hydr. Hose 52" Over All Length; BH Tee to RH Bottom cylinder port. Ends 6FJX-6FJX	1
24	10190	3/8"Hydr.Hose 80" Over All length;bottom BH Along frame ends 6FJX-6FJX	2

# HYDRAULIC PARTS LIST

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>QTY</u>
25	10335	3/8" Hydr. Hose 82" Over All Length; top BH fittings Along frame ends 6FJX-6FJX	2
26	10188	Bulkhead Tee tub frame and beater motor hose	3
27	10337	3/8" Hydr. Hose 98" Over All Length; BH Tee to LH top hydr. Cylinder port . Ends 6FJX-6FJX	1
28	10338	3/8" Hydr. Hose 78" Over All Length; BH Tee to Bottom port on hydr. Cylinder	1
29	10324	3/8" Hydr. Hose 92" Over All Length; BH 90 to Auger ends 6FJX-6FJX	2
30	10328	Adaptor Fitting 8MP-6MJ45	4
31	10262	Hydr. Cylinder see parts break down elsewhere	2
32	10326	Adaptor Fitting 8MP-6MJ90	2
33	10339	Cylinder Pin 1" dia. 2 3/8" Useable length Barrel end	2
Not shown	10340	Clip for Cylinder Pins	8
34	10341	Cylinder Pin 1" dia. 3" Useable length rod end	2
35	10248	Hydraulic Motor RS99030000	1

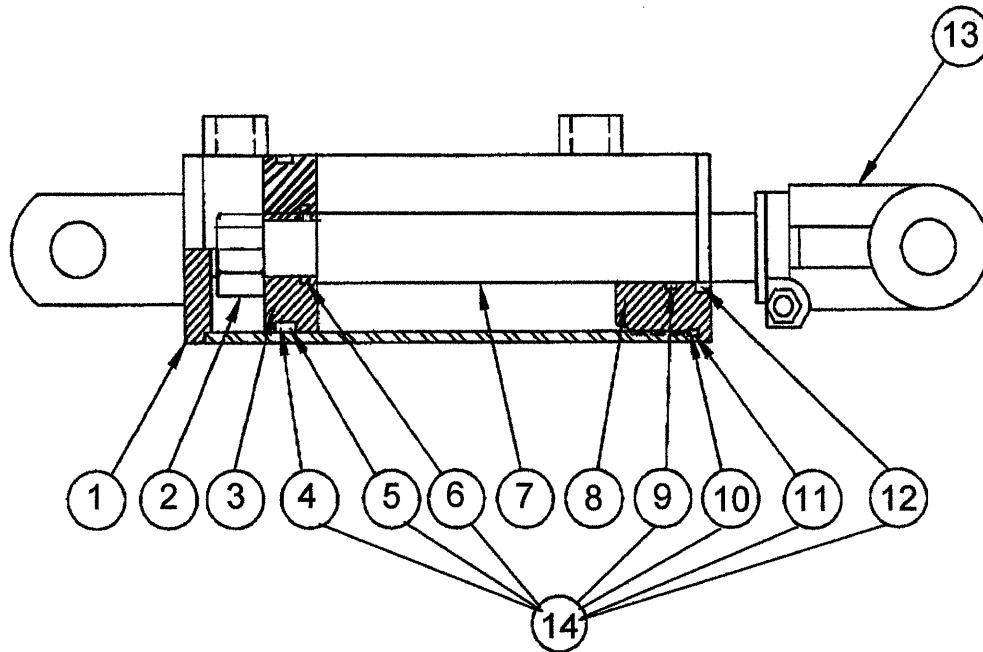
# BMI 3 X 20 TIEROD CYLINDER



## Monarch Industries 3 x 20 Tierod Cylinder

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>Qty</u>
	10377	Complete Cylinder Assembly #645047	2
1	10393	Clevis Cap 492810	1
2	10394	Rod Cap 492812	1
3	10395	Piston 3" dia. 492520	1
4	10396	Cylinder Shaft 492876	1
5	10397	Cylinder Barrel 491750	1
6	10055	Tie-rod 492230	4
7	10064	Pin 1" w/clip 640091	2
8	N/A	clip (sold with #7)	4
9	N/A	Nylock (sold w/#10)	
10	10398	Rod Clevis 492652	1
11	10157	Set Screw 148390	1
12	10399	Tie-Rod Nut 128250	4
13	10400	Nut Piston Rod 129110	1
14	10401	Pipe Plug 186540	1
15	10402	Seal Kit 1-1/4" shaft 639575	1

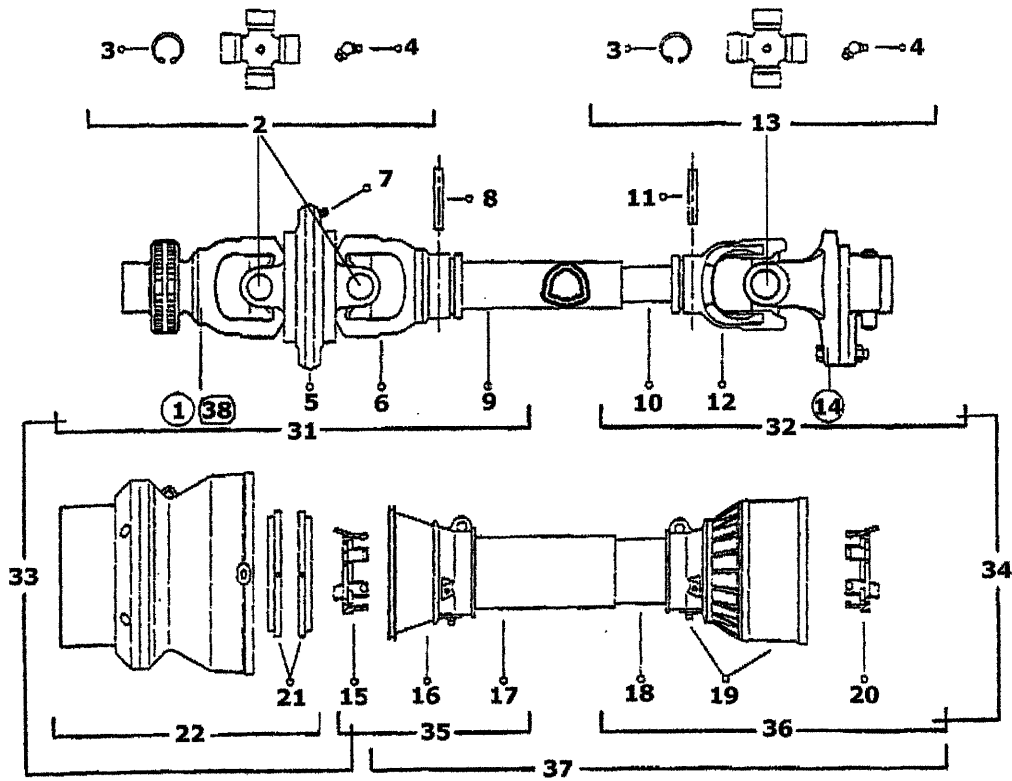
# BMI 3 X 20 WELDED CYLINDER



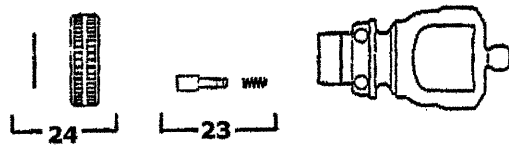
## BMI WELDED CYLINDER PARTS LIST

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>Qty</u>
	10262	Complete CylAssembly 4504882 modelRWC300200	1
1	10263	Barrel Assembly w/clevis 5504882	1
2	10062	Locknut Piston Rod 1-14 th. R3005007	1
3	10264	Piston 3.0 dia. 4604882	1
4	N/A	Part of Seal Kit	
5	N/A	Part of Seal Kit	
6	N/A	Part of Seal kit	
7	10265	Cylinder Shaft	1
8	10266	Gland	1
9	N/A	Part of Seal Kit	
10	N/A	Part of Seal Kit	
11	N/A	Part of Seal Kit	
12	N/A	Part of Seal Kit	
13	10061	Clevis R7600043	1
14	10267	Seal Kit 3604882	1
Not shown	10339	Cylinder Pin 2 3/8 useable length	1
Not shown	10341	Cylinder Pin 3" useable length	1

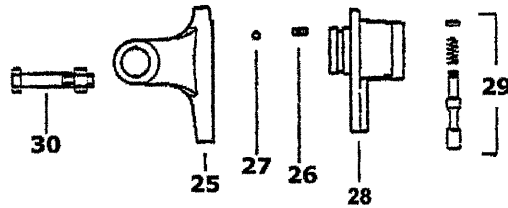
# BMI BONDOLI PTO



① 38



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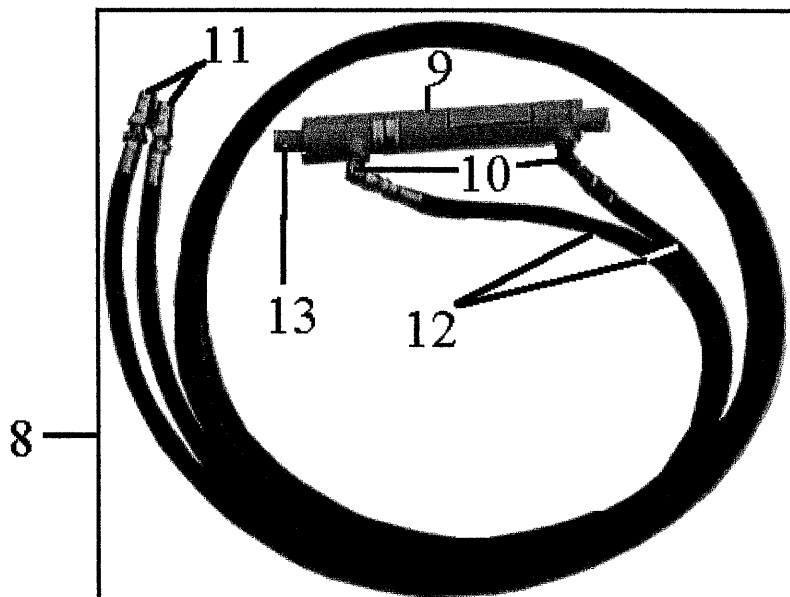
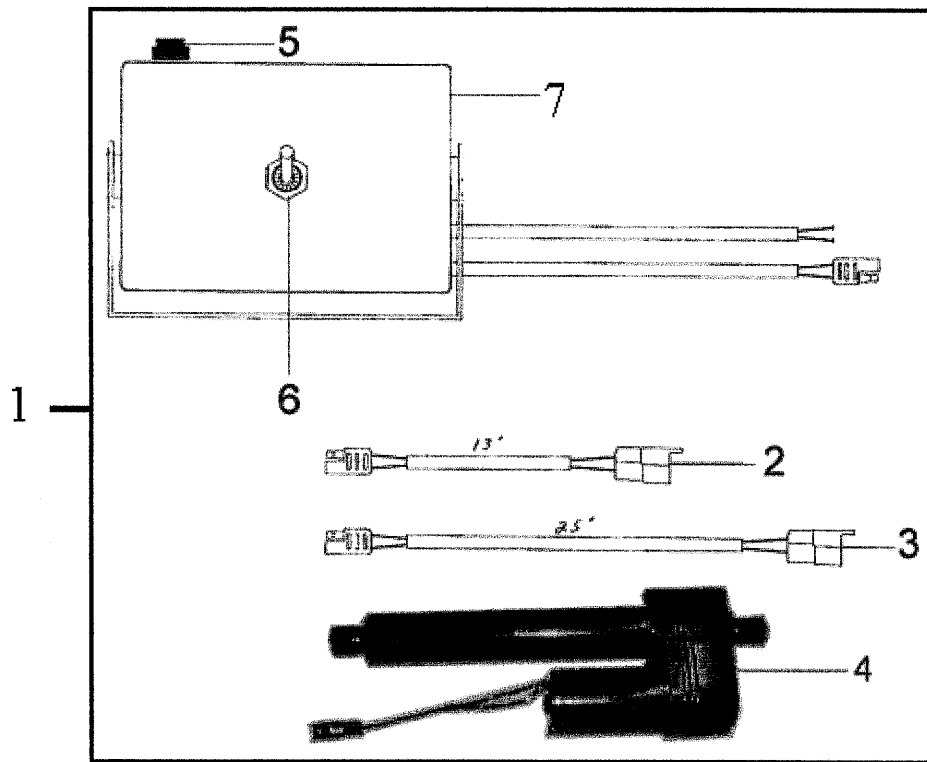
# BMI BONDIOLI PARTS LIST

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>Qty</u>
	10114	Complete PTO Assembly	1
1	10115	Yoke w/bridge 1 3/8 21-spline 573063775	1
2	10116	U-joint Cross Kit 412060012	2
3	10117	Circlip (in cross kit) 338020000	8
4	10118	Grease Zerk ( in cross kit) 348004000	2
5	10119	Central Body CV Joint 511060051	1
6	10120	Yoke 215066854	1
7	10121	Grease Zerk 348017000	1
8	10122	Roll Pin 341042000	1
9	10123	Cardan Tube 225270836	1
10	10124	Cardan Tube CM 245160836	1
11	10125	Roll Pin 341043000	1
12	10126	Inner Tube Yoke 204066852	1
13	10127	U-Joint Cross Kit 41206	1
14	10128	Torque Limiter (quick pin style) 606606064	1
15	10129	Shield Support 6-7 255060005	1
16	10130	Safety Cone 254050001	1
17	10131	CM Safety Tube 236830776	1
18	10132	SM safety Tube 236820776	1
19	10133	I Cone Sets F5-6-7 517050020	1
20	10134	Shield Support 6-7 255060006	1
21	10135	Ring Nut Dowell 255060006	1
22	10136	Complete Shell 517068001	1
23	10137	Complete Push Bottom 403000013	1
24	10138	Hub 240080061	1
25	10139	Yoke 213060020	1
26	10140	Grease Zerk 348012000	1
27	10141	Ball 5/16 362003000	1
28	10142	Splined hub 513083807	1
29	10143	Complete Push Buttom 401000037	2
30	10144	Shear Bolt 432000008	1
31	10145	Half Shaft (Tractor end no shield) 7E5610100T08	1
32	10146	Half Shaft (Impl.end no shield) 8IR610100009	1
33	10147	Half Shaft (Tractor end w/shield) 7E56101R1T08	1
34	10148	Half shaft (Impl.end w/shield) 8IR6101FF003	1
35	10149	Half Safety Shield (trac. End) 5FE6101E1656	1
36	10150	Half Safety Shield (Impl. End) 5F16101FF	1
37	10151	Safety Shield complete 5F06101E1656	1
38	10152	Yoke 1 3/4 20-spline 573063875	1

\*\*\*\*NOTE\*\*\*\*

Bondioli Shaft can be identified by Cone shaped Shield on machine end.

# OPTIONAL ATTACHMENTS & PARTS





# Optional Attachment & Parts List

<u>Ref#</u>	<u>BMI#</u>	<u>Description</u>	<u>Qty</u>
1	10307	Electric Lift Attachment (Side Deflector) 2000,2010	1
1	10308	Electirc lift Attachment (side Deflector) 2020 only	1
Not shown	-----	Attaching hardware same as hydraulic kit	
2	10309	Cable 13' 2000,2010	1
3	10310	Cable 25' 2020 only	1
4	10311	Electric Actuator 2000,2010,2020	1
5	10312	Fuse holder	1
Not shown	10313	Fuse AGC 25	1
6	10314	Switch 3-way	1
7	10315	Box Assembly w/ harness	1
8	10316	Hydraulic Lift Attachment 2000,2010	1
8	10369	Hydraulic Lift Attachment 2020 only	1
9	10317	Hydraulic Cylinder Assembly	1
Not shown	10318	Seal Kit 3604364	1
10	10319	Elbow Fitting 6MB-6MJ90	2
11	10167	ISO Hydraulic Male Coupler 8010-4	2
12	10320	Hydraulic Hose Assembly 3/8 hose w/#6 Female JIC On one end and 1/2" MPT on the other 144" OAL <b>2000,2010 only</b>	2
12	10370	Hydraulic Hose Assembly 3/8 hose w/#6 Female JIC On one end and 1/2 MPT on the other 288" OAL <b>2020 only</b>	2
13	10321	Bolt 1/2 x 3 NC	1
Not shown	10239	Bushing used as spacer	2
Not shown	10322	Bolt 1/2 x 2 NC	1
Not shown	10241	Locknut 1/2 NC	2