



PARTS BOOK

AR3210
ACTION RAKE

Part #91298
Rev. #02
HSMFG031024

Starting Ser. #422SS10001



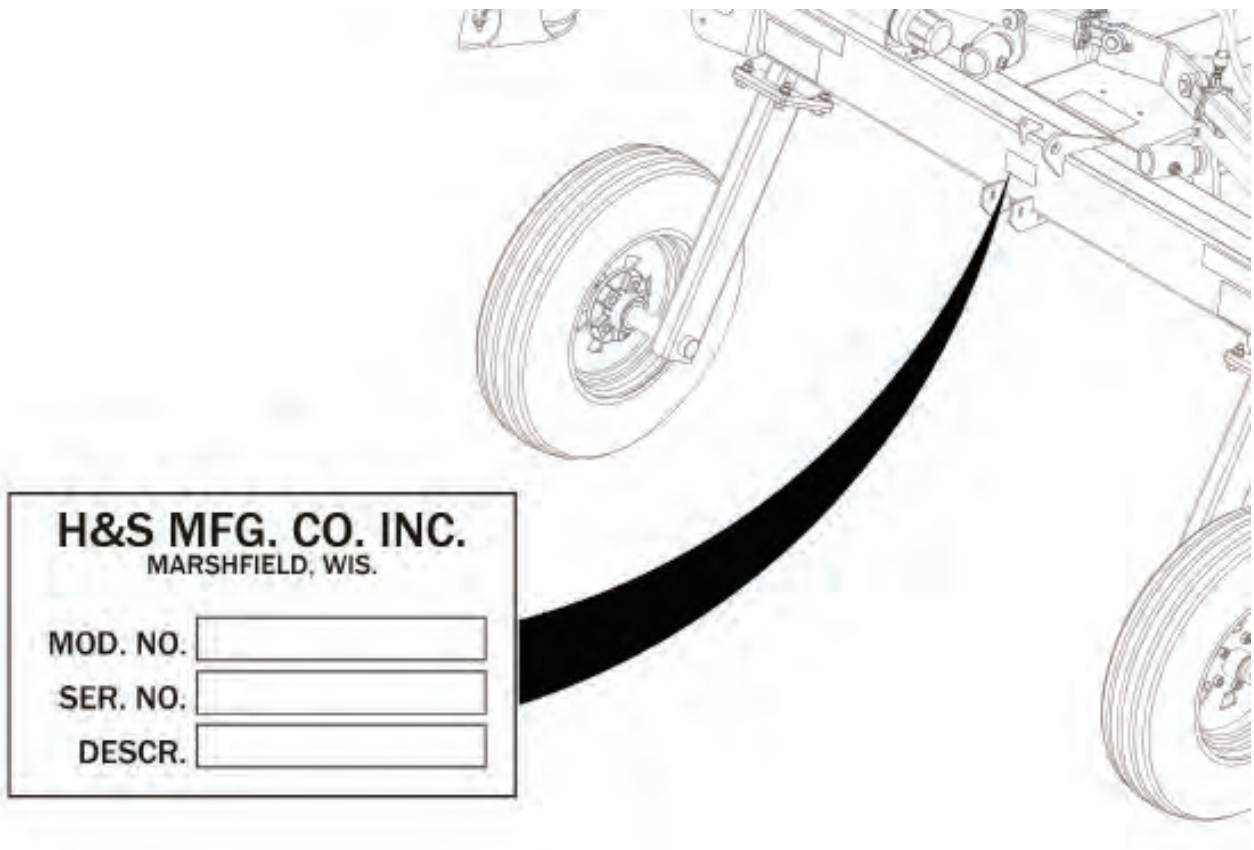
INSTRUCTIONS FOR ORDERING PARTS

All service parts should be ordered through your authorized H&S dealer. Your Dealership will be able to give you faster service if you will provide them with the following:

1. All references to left or right apply to the machine as viewed from the rear.
2. Parts should not be ordered from illustration only. Please order complete part number.
3. If your dealer has to order parts - give shipping instructions:

Via truck - large pieces (please specify local truck lines)

Via United Parcel Service (include full address)



PLEASE RECORD NUMBERS FOR YOUR UNIT FOR QUICK REFERENCE

H&S IS CONTINUALLY STRIVING TO IMPROVE ITS PRODUCTS

We must, therefore, reserve the right to make improvements or changes whenever it becomes practical to do so, without incurring any obligation to make changes or additions to the equipment previously sold.





FIGURE 1
FRAME & COMPONENTS

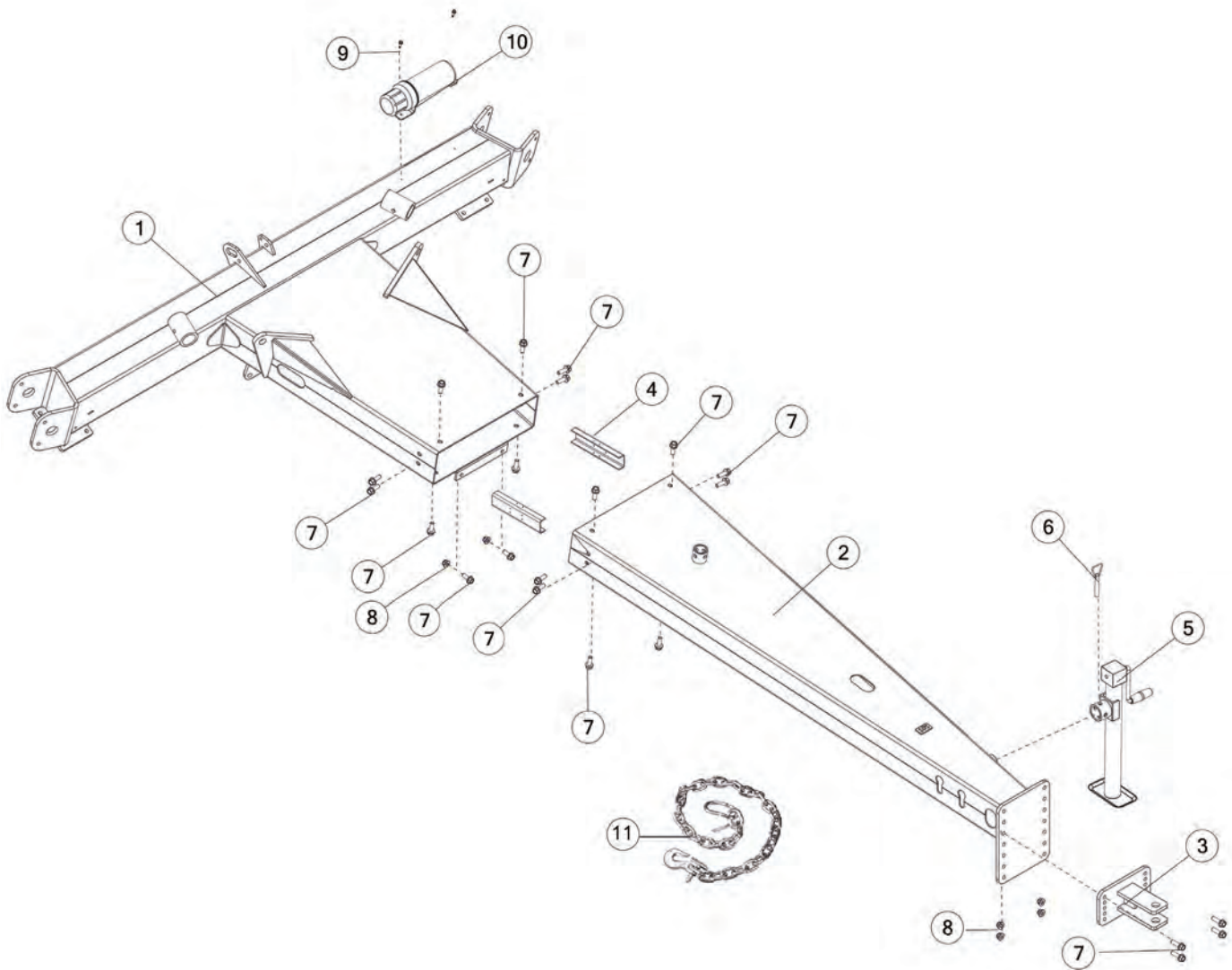




FIGURE 1

FRAME & COMPONENTS

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|---|-----|
| 1 | 90740B | MAIN FRAME W/DECALS | 1 |
| 2 | 90902B | FRONT POLE W/DECALS | 1 |
| 3 | 90513 | HITCH | 1 |
| 4 | HS101702 | BACKER PLATE | 2 |
| 5 | 12N116 | JACK, SIDEWIND, 2000# | 1 |
| 6 | 12N117 | JACK PIN | 1 |
| 7 | YBFB16175 | BOLT FLANGE, 1/2 X 1-3/4 G5 | 20 |
| 8 | YNFG16003 | NUT FLANGE, 1/2 | 6 |
| 9 | YSDR08005 | SELF DRILL SCREW, HEX WASH HEAD, 1/4-14 X 1 | 2 |
| 10 | S522 | MANUAL HOLDER | 1 |
| 11 | SC10100 | SAFETY CHAIN, 10,100 LB (OPTIONAL) | 1 |
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FIGURE 2 REAR FRAME & COMPONENTS

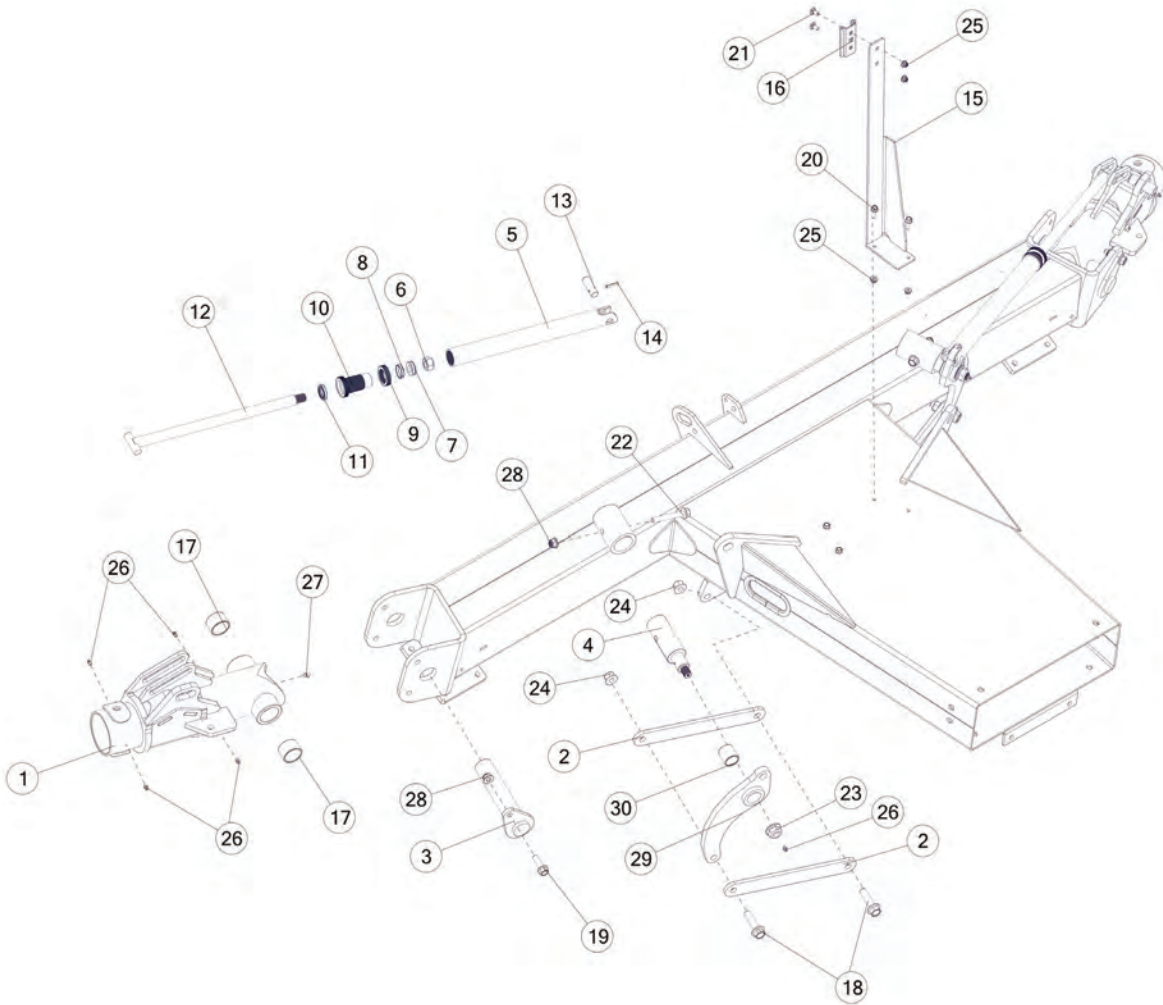




FIGURE 2

REAR FRAME & COMPONENTS

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|--|-----|
| 1 | 89391 | PIVOT, RH | 1 |
| * | 89025 | PIVOT, LH | 1 |
| 2 | 90961 | LINKAGE BAR | 4 |
| 3 | 90576 | PIN | 1 |
| 4 | 89097 | ROCKER PIVOT SHAFT | 2 |
| 5 | 89150 | TUBE | 2 |
| 6 | YNL24006 | NUT HEX, 3/4-10 LKTL C ZC | 2 |
| 7 | 89162 | PISTON | 2 |
| 8 | 95430 | WIPER RING | 2 |
| 9 | 89163 | LOCK RING | 2 |
| 10 | 89161 | BUSHING | 2 |
| 11 | 89257 | SEAL | 2 |
| 12 | 93547 | ROD | 2 |
| 13 | 90675 | LINKAGE PIN | 2 |
| 14 | YPEX08010 | EXPANSION PIN, 1/4 X 1-1/4 | 2 |
| 15 | 96736 | SMV BRACKET | 1 |
| 16 | F97 | SMV BRACKET | 1 |
| 17 | TS85 | BUSHING, BRONZE, 2 OD X 1.752 ID X 1.25 LONG | 4 |
| 18 | YBFB20250 | BOLT FLANGE, 5/8 X 2-1/2 G5 | 4 |
| 19 | YBFB16175 | BOLT FLANGE, 1/2 X 1-3/4 G5 | 2 |
| 20 | YBFB10001 | BOLT FLANGE, 5/16 X 1 G5 | 2 |
| 21 | YBCR10030 | BOLT CARRIAGE, 5/16-18 X 3/4 G5 ZC | 2 |
| 22 | YBFB16350 | BOLT FLANGE, 1/2 X 3-1/2 G5 | 4 |
| 23 | YNFG24006 | NUT HEX, FLANGED, TOP LOCK, 3/4-10 GG ZC | 2 |
| 24 | YNFG20005 | NUT FLANGE, 5/8-11 LKTL F ZC | 4 |
| 25 | YNFG10005 | NUT FLANGE, 5/16 GF | 4 |
| 26 | G89 | STRAIGHT ZERK, 1/4-28 | 10 |
| 27 | RG51 | ZERK, 90 DEGREE 1/4-28 | 2 |
| 28 | YNFG16003 | NUT FLANGE, 1/2 GF | 4 |
| 29 | 89190 | ROCKER ARM | 2 |
| 30 | G16 | BUSHING | 2 |
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FIGURE 3
LIFT ARM & COMPONENTS RH

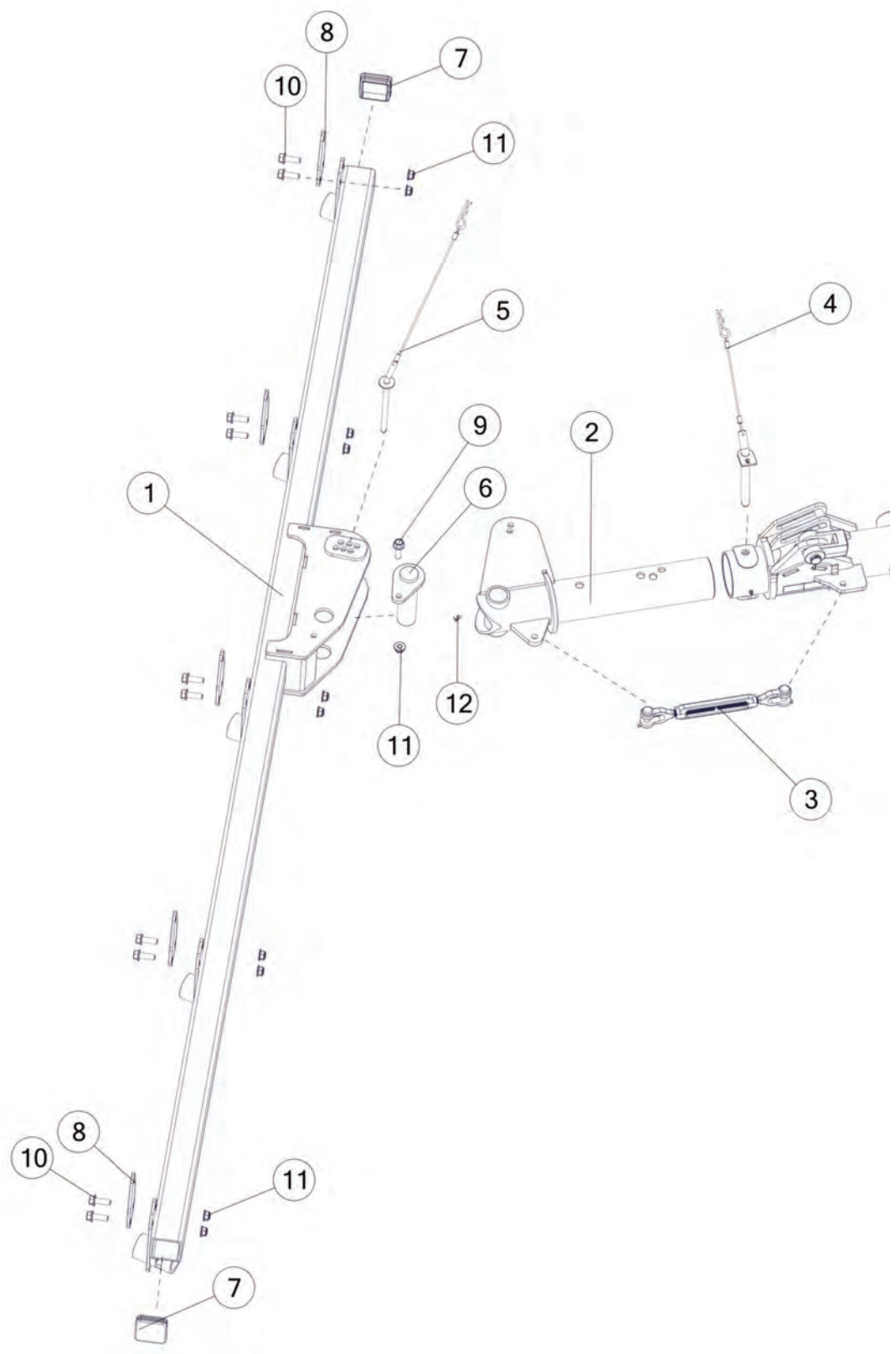




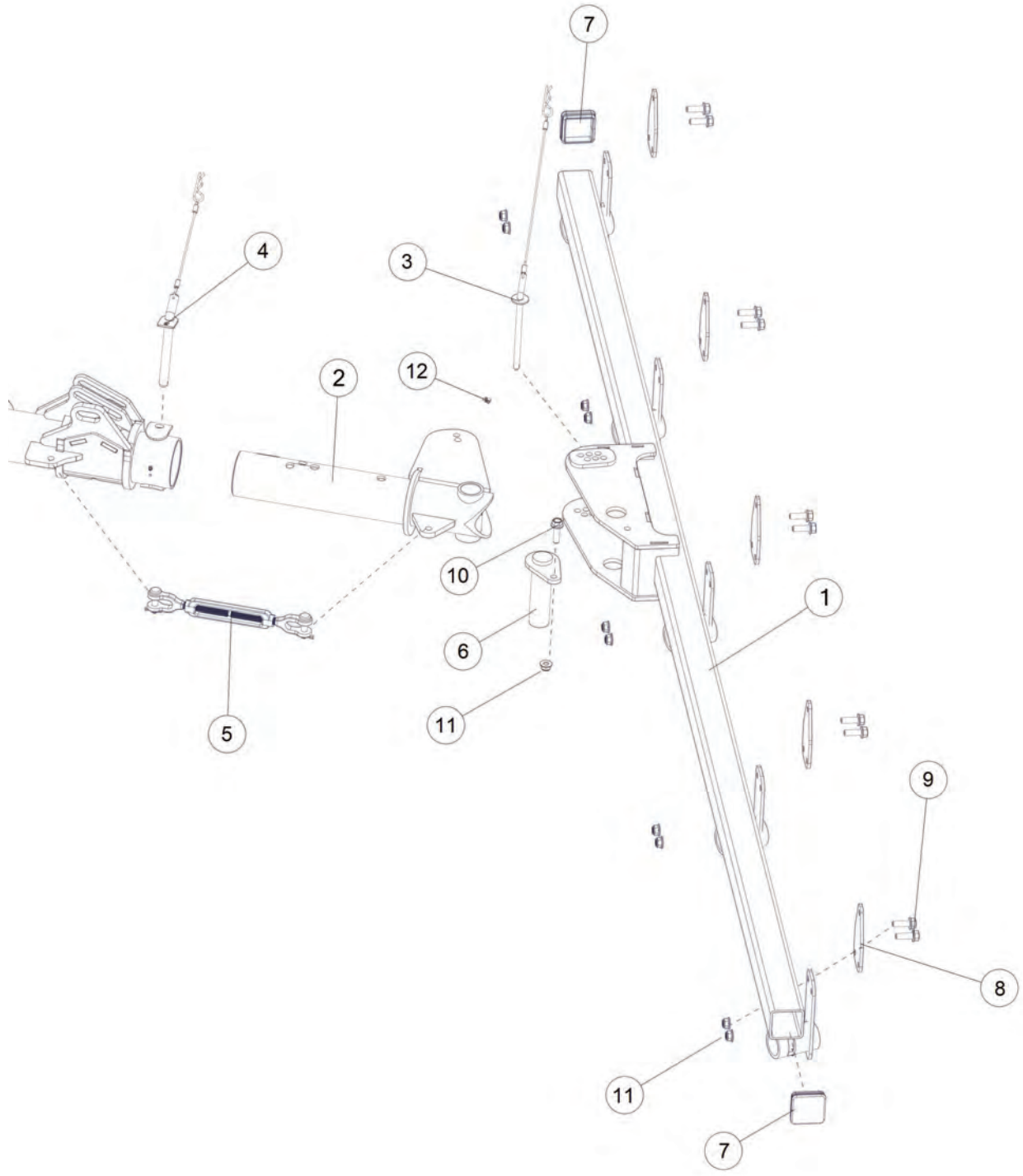
FIGURE 3
LIFT ARM & COMPONENTS RH

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|-----------------------------|-----|
| 1 | 89427B | RAKE BEAM, RH W/DECALS | 1 |
| 2 | 89402 | OUTER SLIDER | 1 |
| 3 | 93101 | TURNBUCKLE | 1 |
| 4 | 93554 | PIN ASSY, ARM SLIDER | 1 |
| 5 | 89041 | PIN | 1 |
| 6 | 90601 | PIN | 1 |
| 7 | 89007 | SQUARE PLUG | 2 |
| 8 | 99683 | PIVOT GUSSET | 5 |
| 9 | YBFB16175 | BOLT FLANGE, 1/2 X 1-3/4 G5 | 1 |
| 10 | YBFB16150 | BOLT FLANGE, 1/2 X 1-1/2 G5 | 10 |
| 11 | YNFG16003 | NUT FLANGE, 1/2 GF | 11 |
| 12 | RG51 | ZERK, 90 DEGREE 1/4-28 | 1 |
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FIGURE 4
LIFT ARM & COMPONENTS LH



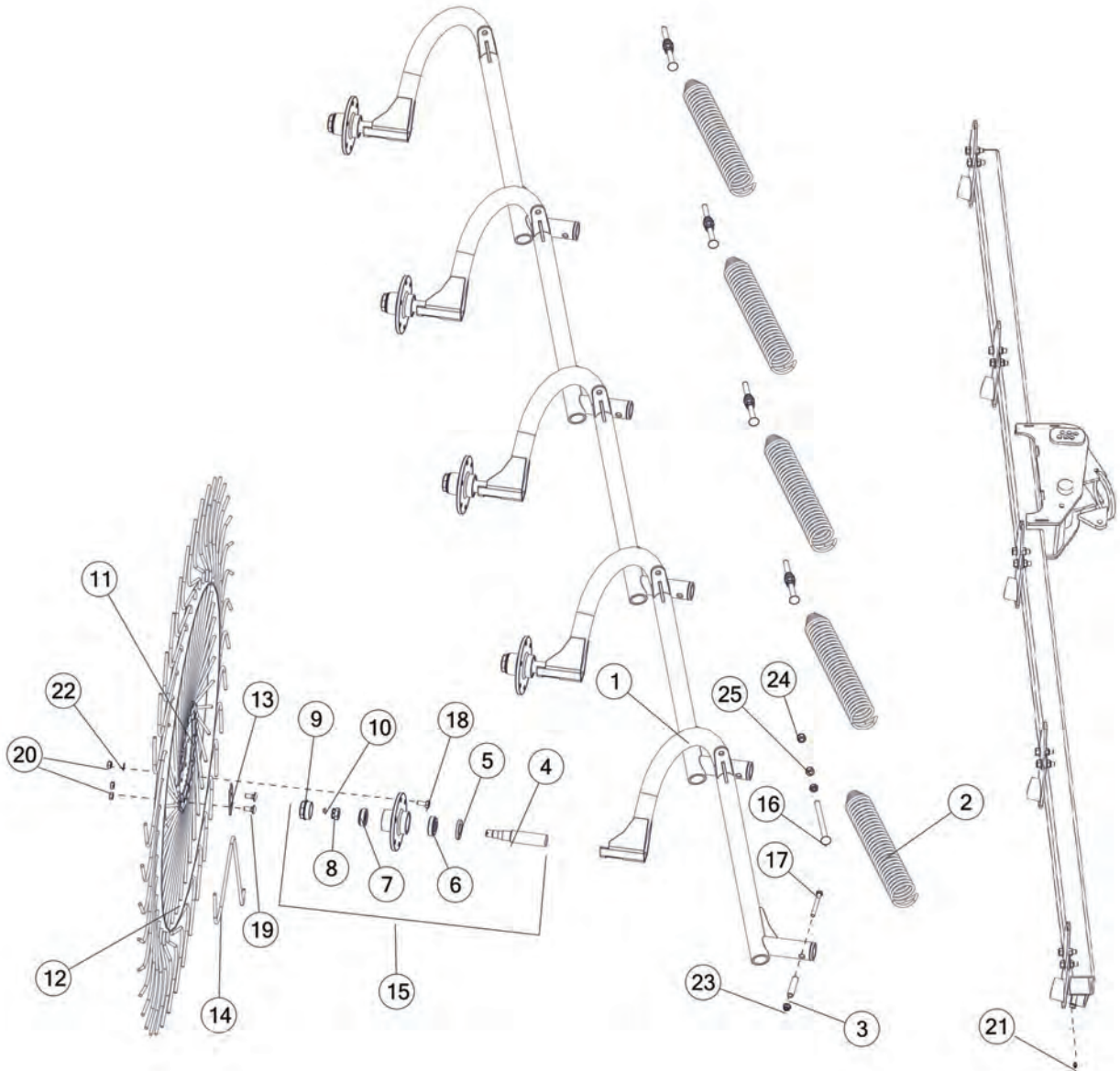




FIGURE 5 CANDY CANE & RAKE WHEEL COMPONENTS RH

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|----------------------------------|-----|
| 1 | 75877 | CANDY CANE WLDMNT, RH | 5 |
| 2 | 75862 | SPRING, EXTENSION, CANDY CANE | 5 |
| 3 | 66247 | SPACER, TUBE | 5 |
| 4 | BFR36 | RAKE WHEEL SPINDLE | 5 |
| 5 | T163 | SEAL | 5 |
| 6 | 600012 | TAPER BEARING, 2.05 X .75 | 5 |
| 7 | 600014 | TAPER BEARING, 1.85 X .75 | 5 |
| 8 | T172 | NUT HEX, CASTLE, 18MM - 1-1/2 G2 | 5 |
| 9 | T173 | HUB CAP | 5 |
| 10 | 1088 | CLIP, RETAINING | 5 |
| 11 | FR70 | RAKE WHEEL ONLY 60, RH | 5 |
| 12 | FR72 | RAKE WHEEL OUTER RING, BLACK 60 | 5 |
| 13 | FR74 | RAKE TOOTH CLIP | 50 |
| 14 | FR73 | RAKE WHEEL TOOTH, BLACK 60 | 200 |
| 15 | 1081 | RAKE WHEEL HUB AND SPINDLE | 5 |
| 16 | YBCR16060 | BOLT CARRIAGE, 1/2 X 7 G5 | 5 |
| 17 | YBFB12300 | BOLT HEX, 3/8 X 3 G5 | 5 |
| 18 | YBHH76015 | BOLT HEX, M10-1.5 X 25 | 30 |
| 19 | YBCR76005 | BOLT CARRIAGE, 10MM X 25MM | 100 |
| 20 | YNHX76015 | NUT HEX, M10-1.5 | 130 |
| 21 | G89 | STRAIGHT ZERK 1/4-28 X 90 | 5 |
| 22 | YWLO76015 | WASHER LOCK, M10 | 30 |
| 23 | YNFG12005 | NUT FLANGE, 3/8 GF | 6 |
| 24 | YNFG16003 | NUT FLANGE, 1/2 | 6 |
| 25 | YNJM16005 | NUT JAM, 1/2 | 10 |
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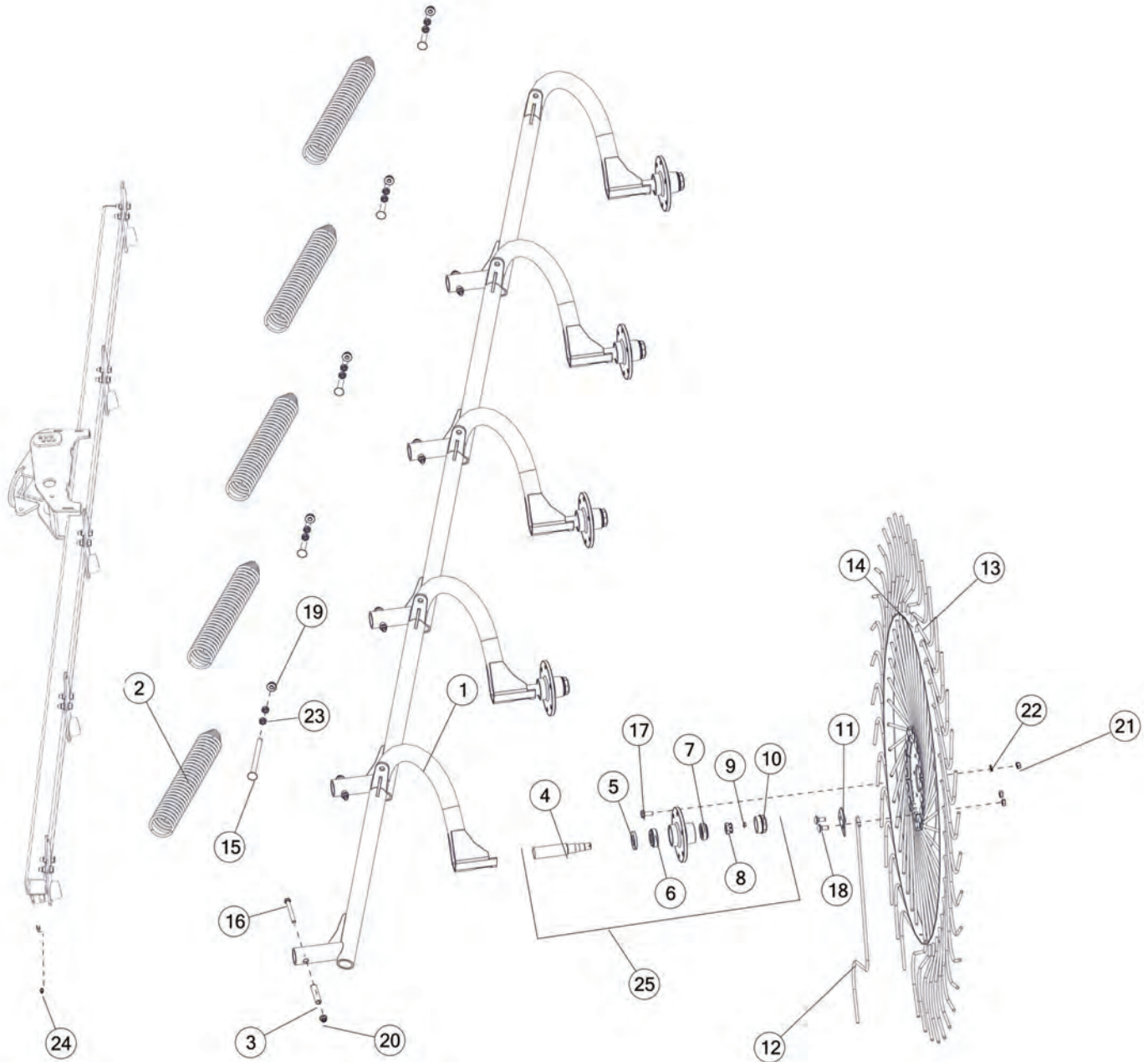




FIGURE 6

CANDY CANE & RAKE WHEEL COMPONENTS LH

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|----------------------------------|-----|
| 1 | 75878 | CANDY CANE WLDMNT, LH | 5 |
| 2 | 75862 | SPRING, EXTENSION, CANDY CANE | 5 |
| 3 | 66247 | SPACER, TUBE | 5 |
| 4 | BFR36 | RAKE WHEEL SPINDLE | 5 |
| 5 | T163 | SEAL | 5 |
| 6 | 600012 | TAPER BEARING, 2.05 X .75 | 5 |
| 7 | 600014 | TAPER BEARING, 1.85 X .75 | 5 |
| 8 | T172 | NUT HEX, CASTLE, 18MM - 1-1/2 G2 | 5 |
| 9 | 1088 | CLIP, RETAINING | 5 |
| 10 | T173 | HUB CAP | 5 |
| 11 | FR74 | RAKE TOOTH CLIP | 50 |
| 12 | FR73 | RAKE WHEEL TOOTH, BLACK 60 | 200 |
| 13 | FR69 | RAKE WHEEL ONLY 60 IN LH | 1 |
| 14 | FR72 | RAKE WHEEL OUTER RING, BLACK 60 | 5 |
| 15 | YBCR16060 | BOLT CARRIAGE, 1/2 X 7 G5 | 5 |
| 16 | YBFG12300 | BOLT FLANGE, 3/8 X 3 | 5 |
| 17 | YBHH76015 | BOLT HEX, M10-1.5 X 25 | 30 |
| 18 | YBCR76005 | BOLT CARRIAGE, 10MM X 25MM | 100 |
| 19 | YNFG16003 | NUT FLANGE, 1/2 GF | 5 |
| 20 | YNFG12005 | NUT FLANGE, 3/8 GF | 5 |
| 21 | YNHX76015 | NUT HEX, M10-1.5 | 130 |
| 22 | YWLO76015 | WASHER LOCK, M10 | 30 |
| 23 | 1081 | RAKE WHEEL HUB AND SPINDLE | 5 |
| 24 | G89 | STRAIGHT ZERK 1/4-28 X 90 | 5 |
| 25 | YNJM16005 | NUT JAM, 1/2 | 10 |
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FIGURE 7

AXLE & HUB COMPONENTS

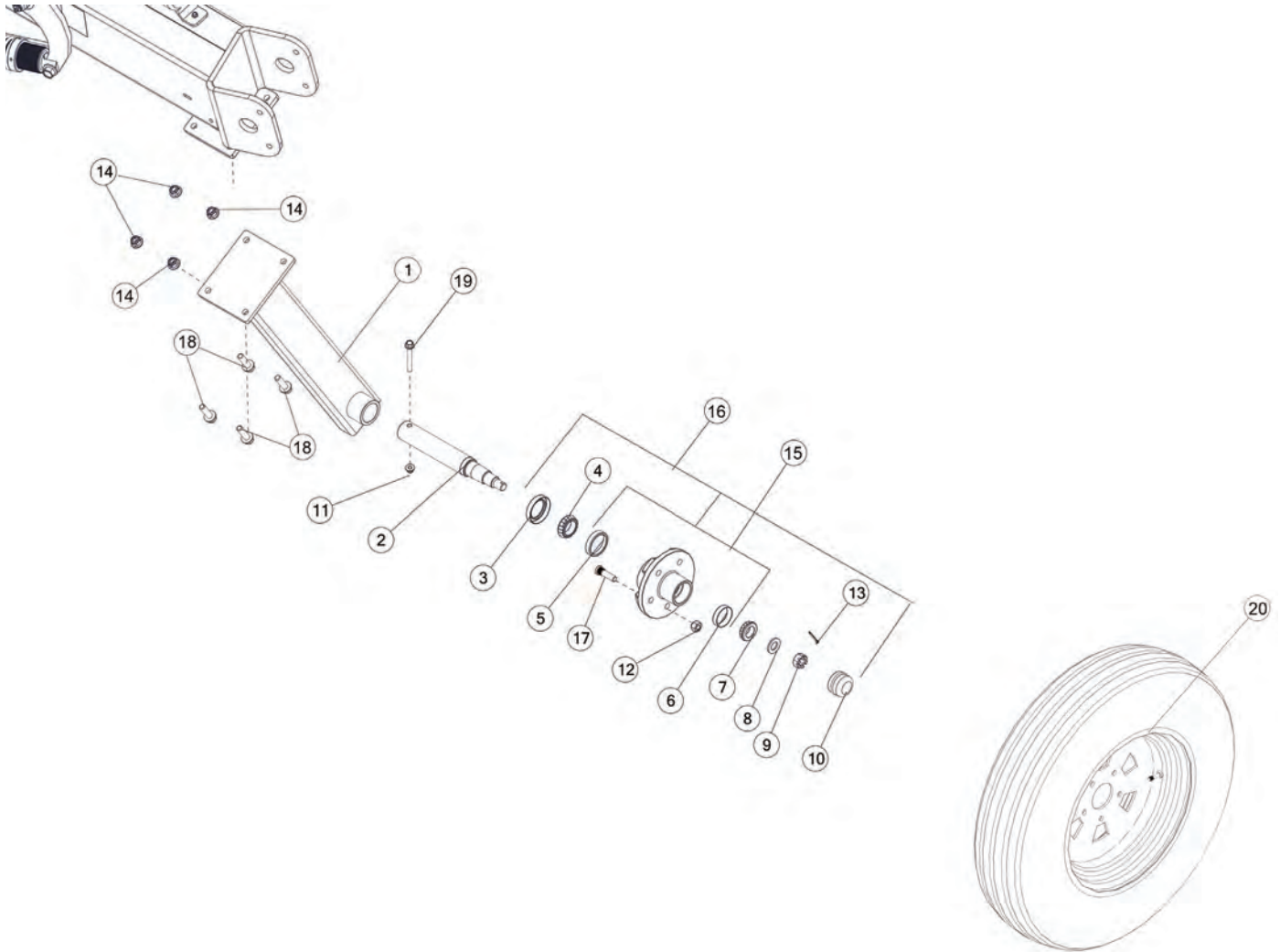




FIGURE 7

AXLE & HUB COMPONENTS

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|--|-----|
| 1 | 89423 | AXLE | 2 |
| 2 | 88062 | SPINDLE | 2 |
| 3 | CAT5 | GREASE SEAL | 2 |
| 4 | CAT6 | INNER BEARING | 2 |
| 5 | CAT7 | INNER RACE | 2 |
| 6 | BFR275 | RACE | 2 |
| 7 | CAT10 | OUTER BEARING (3500# AXLE) | 2 |
| 8 | YWFL24010 | WASHER FLAT, SAE 3/4, PLAIN | 2 |
| 9 | YNSL24010 | NUT SLOT, 3/4-16 NA G2 NF | 2 |
| 10 | CAT46 | CAP, HUB | 2 |
| 11 | YNFG12006 | NUT FLANGE, 3/8 GF | 2 |
| 12 | YNWL16005 | NUT WHEEL, 1/2-20 NA G5 ZC | 10 |
| 13 | YPCT05010 | COTTER PIN, 5/32 X 1-1/2 | 2 |
| 14 | YNFG16003 | NUT FLANGE, 1/2 GF | 8 |
| 15 | CAT8 | HUB, 545, 5 BOLT, 1250 LBS, WITH RACES | 2 |
| 16 | 10WR49 | GROUND WHEEL HUB W/CUPS | 2 |
| 17 | YBSD16005 | BOLT STUD, 1/2 X 1-7/8 G5 | 10 |
| 18 | YBFB16175 | BOLT FLANGE, 1/2 X 1-3/4 G5 | 8 |
| 19 | YBFB12300 | BOLT FLANGE, 3/8 X 3 G5 | 2 |
| 20 | 8605SR | 205/75D15 LRC BIAS TIRE ON 15X5 SILVER WHEEL | 2 |
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FIGURE 8 HYDRAULICS

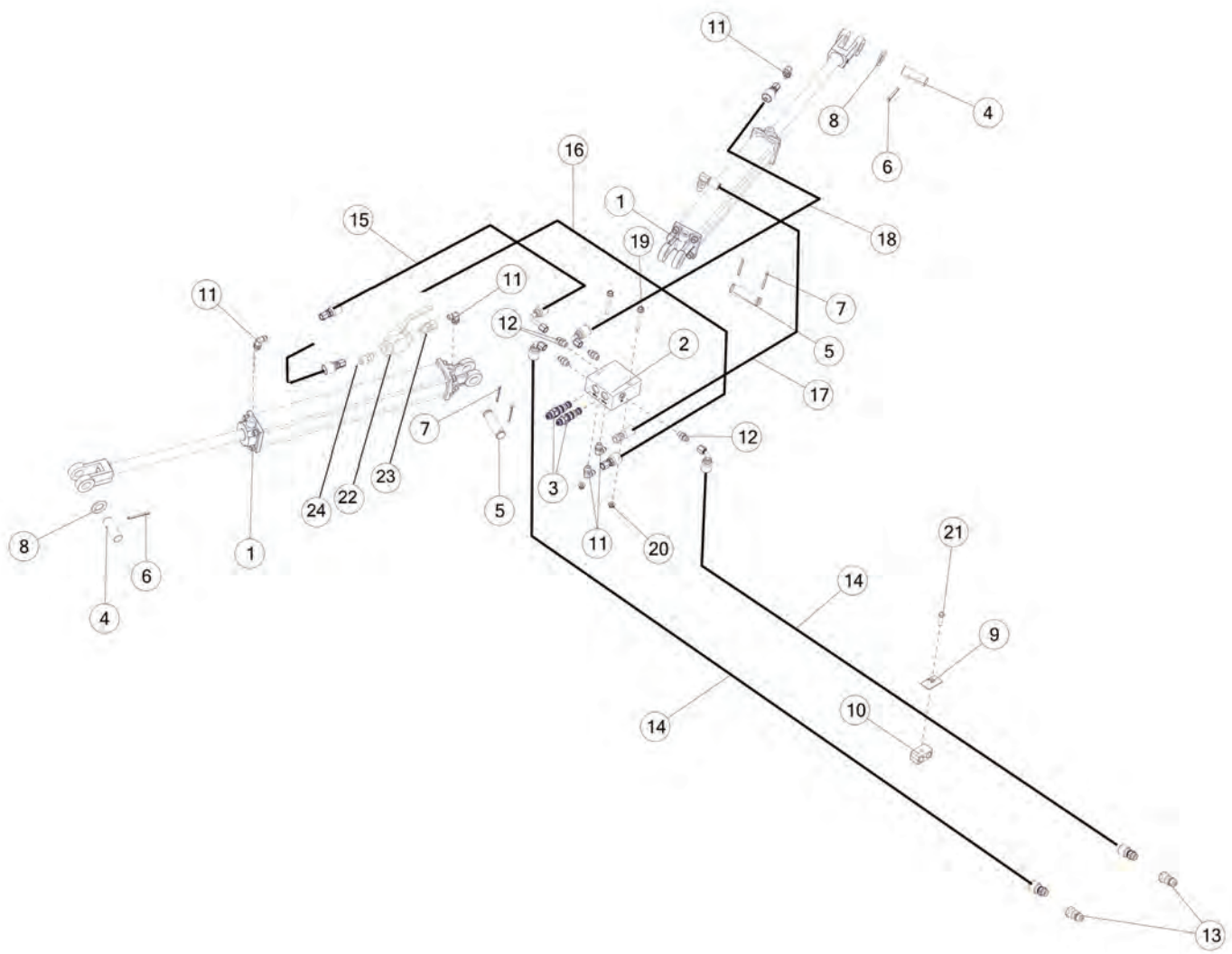




FIGURE 8 HYDRAULICS

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|--------------------------------------|-----|
| 1 | 93155 | HYDRAULIC CYLINDER, 2-1/2 X 16 | 2 |
| 2 | 60426 | HYDRAULIC MANIFOLD | 1 |
| 3 | 66920 | CARTRIDGE, COUNTERBALANCE | 2 |
| 4 | 23N107 | CYLINDER PIN | 2 |
| 5 | T143 | HYDRAULIC CYLINDER PIN | 2 |
| 6 | YPCT07005 | COTTER PIN, 7/32 X 2 | 2 |
| 7 | YPCT06020 | COTTER PIN, 3/16 X 2 | 4 |
| 8 | 16SV136 | WASHER, FLAT, 1.75 X 1.02 X 0.13 ZC | 2 |
| 9 | 56563 | CLAMP TOP PLATE | 1 |
| 10 | CHM278 | TWO LINE CLAMP BLOCK, 3/8 | 1 |
| 11 | CHM268 | FITTING, 90, 6JIC X 6ORB | 5 |
| 12 | CHM257 | FITTING, ST, 6JIC X 6ORB STL | 4 |
| 13 | 67148 | FITTING, ST, 8ORB, QUICK COUPLER TIP | 2 |
| 14 | 89342 | HYDRAULIC HOSE, 6, 206 | 2 |
| 15 | 96499 | HYDRAULIC HOSE, 6, 74 | 1 |
| 16 | 96498 | HYDRAULIC HOSE, 6, 65 | 1 |
| 17 | 70094 | HYDRAULIC HOSE, 6, 34 | 1 |
| 18 | 96497 | HYDRAULIC HOSE, 6, 38 | 1 |
| 19 | YBFB10275 | BOLT FLANGE, 5/16 X 2-3/4 G5 | 2 |
| 20 | YNFG10005 | NUT FLANGE, 5/16 GF | 2 |
| 21 | 56568 | CLAMP BOLT, 5/16-18 x 1-3/8 | 1 |
| 22 | 59235 | BALL VALVE, 3/8 HIGH PRESSURE | 1 |
| 23 | CHM266 | FITTING STRAIGHT, 3/8 JIC, 38 NPT | 1 |
| 24 | CHM202 | FITTING STRAIGHT, 6JIC, 6NPT | 1 |
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FIGURE 9 CYLINDER

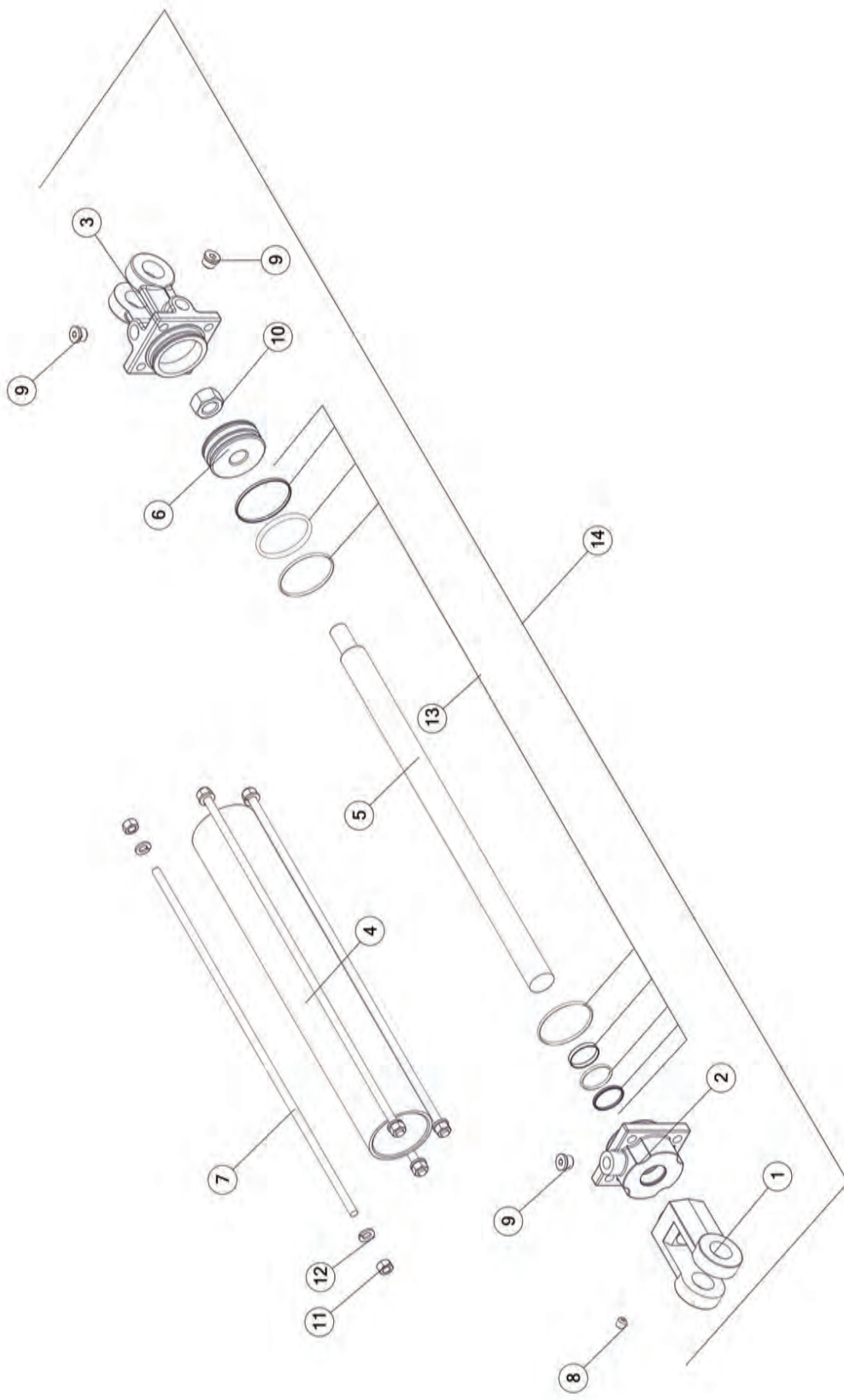




FIGURE 10

OPTIONAL CENTER KICKER WHEEL (ARO2CKW)

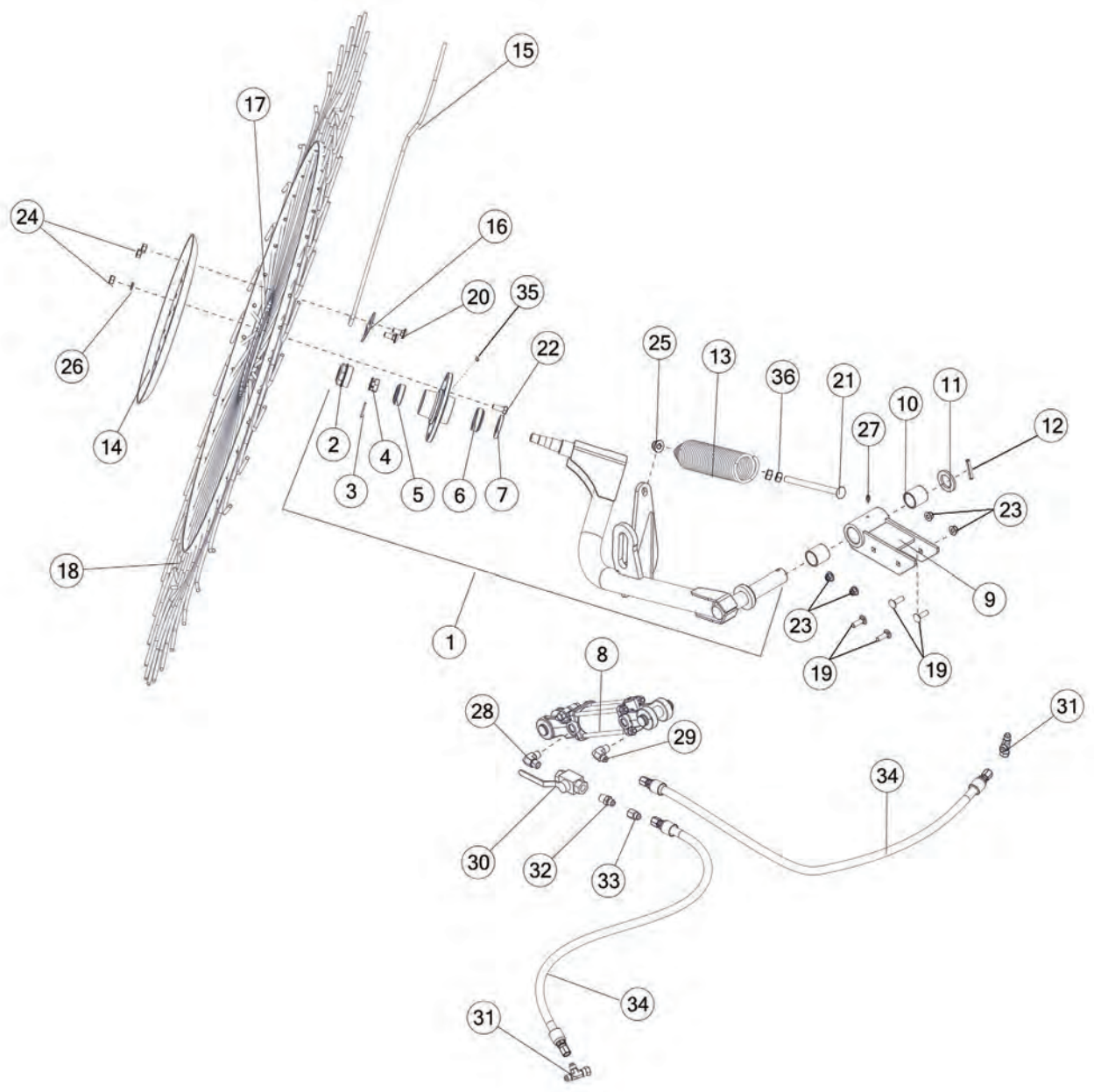




FIGURE 10

OPTIONAL CENTER KICKER WHEEL (ARO2CKW)

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|---|-----|
| 1 | 89474 | REAR CANDY CANE | 1 |
| 2 | T173 | CAP, HUB, RAKE WHEEL | 1 |
| 3 | 1088 | CLIP, RETAINING | 1 |
| 4 | T172 | NUT, HEX, 18MM - 1.5, CASTLE, G2, NF | 1 |
| 5 | 600014 | TAPER BEARING, 1.85 X .75 COMPLETE | 1 |
| 6 | 600012 | TAPER BEARING, 2.05 X .75 COMPLETE | 1 |
| 7 | T163 | SEAL, 2.05 X 1.25 X .25 | 1 |
| 8 | 89481 | HYDRAULIC CYLINDER, 2 X 4 | 1 |
| 9 | 89470 | KICKER WHEEL MOUNT | 1 |
| 10 | G16 | BUSHING, BRONZE | 2 |
| 11 | BFR229 | WASHER, SHIM .185 X 1.281 ID X 2 OD | 1 |
| 12 | YPEX10015 | EXPANSION PIN, 5/16 X 1-3/4 | 1 |
| 13 | 75862 | SPRING, EXTENSION, CANDY CANE | 1 |
| 14 | FR71 | RAKE WHEEL CENTER 60 IN BLACK | 1 |
| 15 | FR73 | BIGGY RAKE WHEEL TOOTH, 60 IN BLACK | 40 |
| 16 | FR74 | RAKE TOOTH CLIP BLACK | 10 |
| 17 | FR72 | RAKE WHEEL BAND, 60 IN BLACK | 1 |
| 18 | FR70 | RH RAKE WHEEL COMPLETE, 60 | 1 |
| 19 | YBCR12020 | BOLT CARRIAGE, 3/8-16 X 1-1/4 G5 ZC | 4 |
| 20 | YBCR76005 | BOLT CARRIAGE, M10-1.5 X 25MM 8.8 NF | 20 |
| 21 | YBCR16060 | BOLT CARRIAGE, 1/2-13 X 7 G5 ZC | 1 |
| 22 | YBHH76015 | BOLT HEX, M10-1.5 X 25 10.9 ZC | 6 |
| 23 | YNFG12006 | NUT FLANGE, 3/8 GF | 4 |
| 24 | YNHX76015 | NUT HEX, M10-1.5 NA CL10 ZC | 26 |
| 25 | YNFG16003 | NUT FLANGE, 1/2 GF | 1 |
| 26 | YWLO76015 | WASHER, LOCK, M10 | 6 |
| 27 | G89 | STRAIGHT ZERK, 1/4-28 | 1 |
| 28 | 8002 | 3/8 NPT MALE TO MALE ELBOW | 1 |
| 29 | CHM164 | FITTING, 90, 6JIC X 3/8NPT | 1 |
| 30 | 59235 | BALL VALVE, 3/8 HIGH PRESSURE | 1 |
| 31 | CHM242 | FITTING TEE, 6JIC X 6JIC X 6JIC | 2 |
| 32 | CHM202 | FITTING, ST, 06JIC, 06NPT | 1 |
| 33 | 58144 | IN-LINE CONNECTOR, ORIFICE, 6-XHX7-S .062 | 1 |
| 34 | 93195 | HYDRAULIC HOSE, 6, 40.5 | 2 |
| 35 | 600034 | GREASE NIPPLE | 1 |
| 36 | YNJM16005 | NUT JAM, 1/2 A | 2 |
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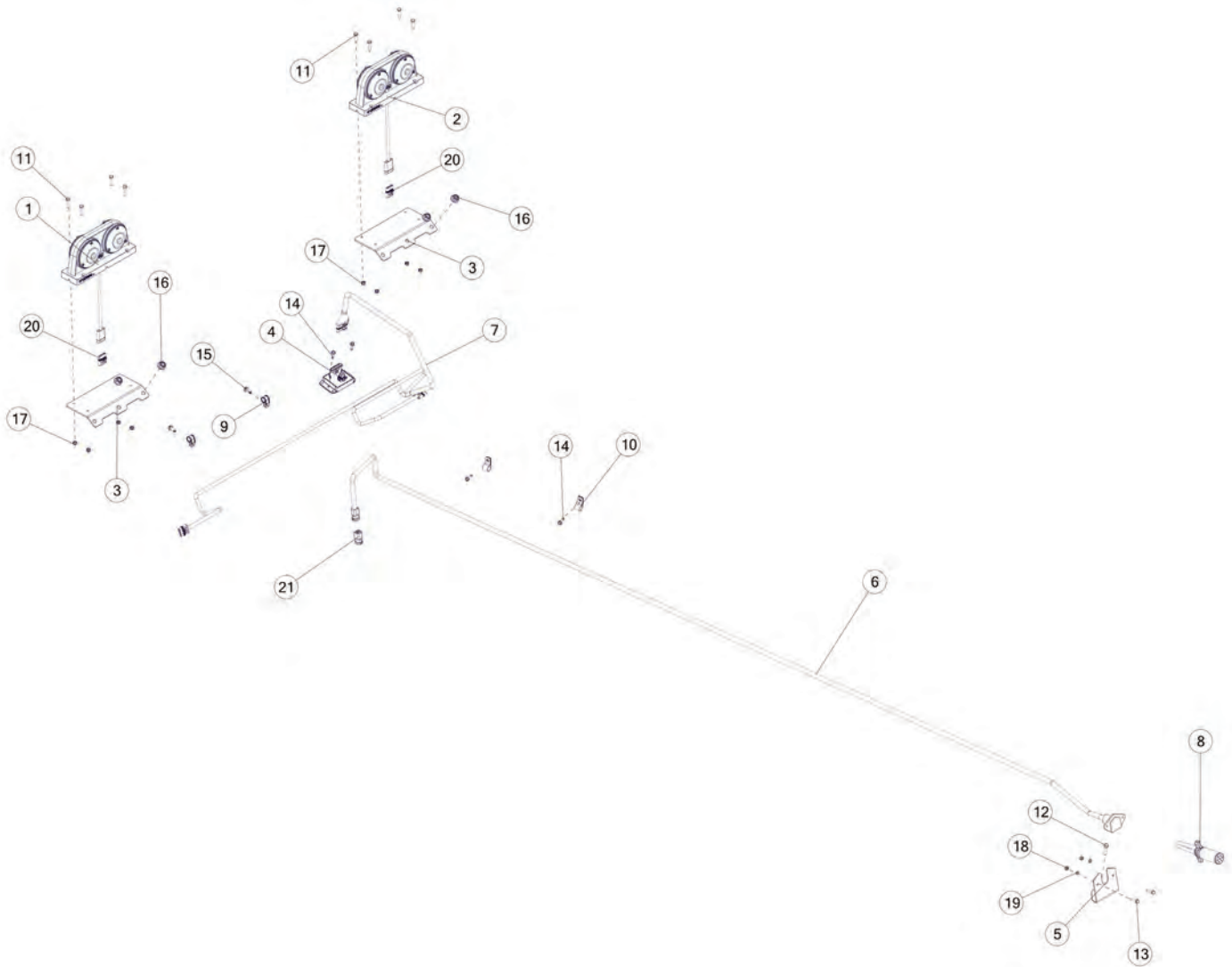




FIGURE 11 OPTIONAL LIGHTS (AROLIGHT2)

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|--|-----|
| 1 | 77924 | TAIL LIGHT ASSY, RH | 1 |
| 2 | 77923 | TAIL LIGHT ASSY, LH | 1 |
| 3 | 96052 | LIGHT BRACKET | 2 |
| 4 | 69908 | MODULE, CONTROL, BLINKER | 1 |
| 5 | BFR659 | LIGHT BRACKET | 1 |
| 6 | 77986 | LIGHT HARNESS | 1 |
| 7 | 77990 | ELEC HARNESS, LIGHT, REAR | 1 |
| 8 | TLPC | TRANSPORT LIGHT CORD | 1 |
| 9 | HGV162 | RUBBER WIRE HOLDER, 1/2 | 2 |
| 10 | HGV72 | CUSHION WIRE CLAMP 3/4 | 2 |
| 11 | YBHH08030 | BOLT HEX, 1/4 X 1-1/4 GR 2 | 8 |
| 12 | 56568 | CLAMP BOLT 5/16-18 x 1-3/8 | 1 |
| 13 | YBHH08005 | BOLT HEX, 1/4 X 1 GR 2 | 2 |
| 14 | YSDR08005 | SELF DRILL SCREW, HEX WASH HD, 1/4-14 X 1 ZC | 4 |
| 15 | YSHW10034 | THREAD CUTTING SCREW, 5/16 X 3/4 | 2 |
| 16 | YNFG16003 | NUT FLANGE, 1/2 GF | 4 |
| 17 | YNNY08005 | NUT HEX, 1/4-20 LKNY G2 ZC | 8 |
| 18 | YNHX08005 | NUT HEX, 1/4-20 NA A ZC | 2 |
| 19 | YWLO08005 | WASHER, LOCK, 1/4 ZC | 2 |
| 20 | 74269 | ELEC, WTHRPK, 4 WAY , FEMALE | 2 |
| 21 | 75000 | ELEC, WTHRPK, 4 SQ, MALE | 1 |
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FIGURE 12

OPTIONAL TANDEM AXLE ASSEMBLY (ARO3TA)

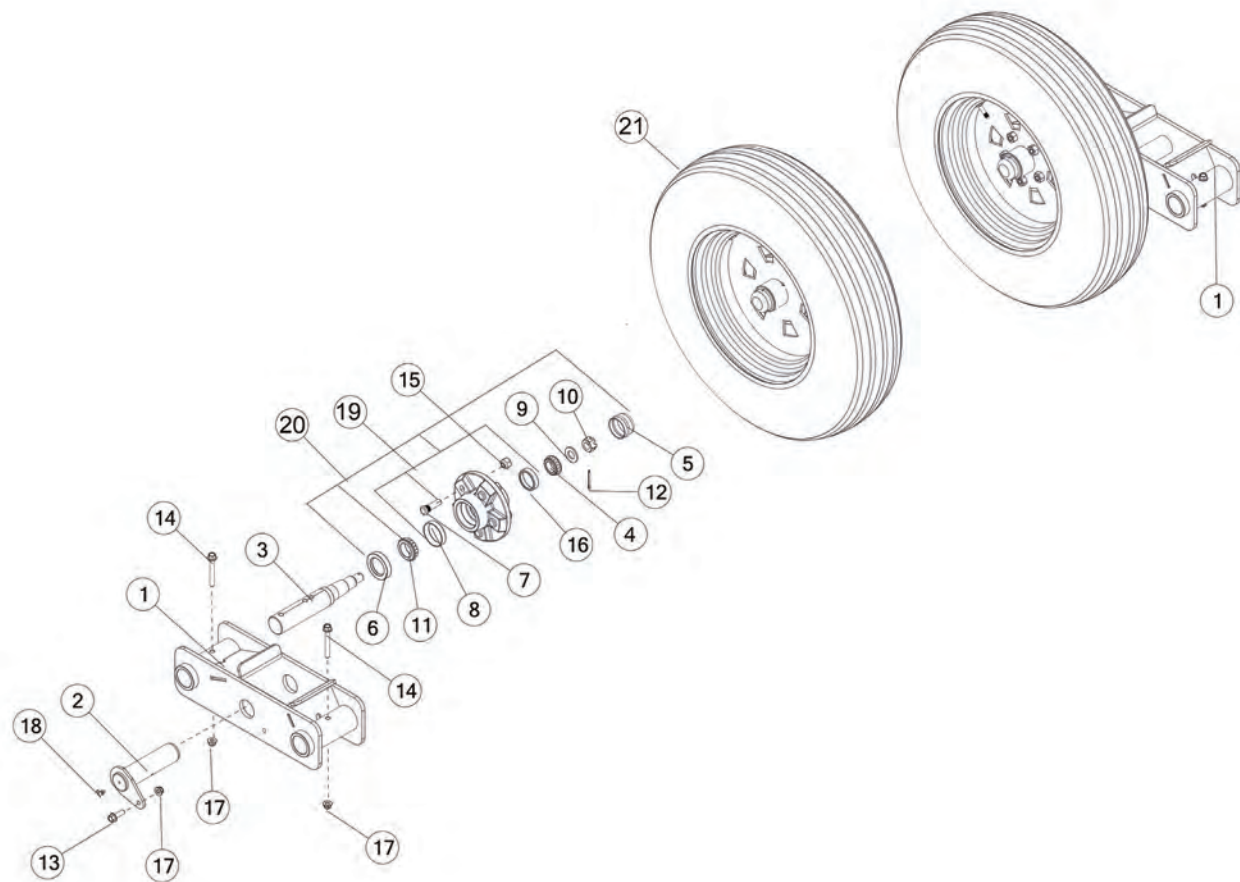




FIGURE 12 OPTIONAL TANDEM AXLE ASSEMBLY (ARO3TA)

| REF # | PART # | DESCRIPTION | QTY |
|-------|-----------|--|-----|
| 1 | 89466 | WALKING BEAM AXLE | 2 |
| 2 | 89490 | WALKING BEAM PIN | 2 |
| 3 | 88062 | SPINDLE | 2 |
| 4 | CAT10 | BEARING | 2 |
| 5 | CAT46 | CAP, HUB | 2 |
| 6 | CAT5 | GREASE SEAL | 2 |
| 7 | YBSD16005 | BOLT STUD, 1/2 X 1-7/8 G5 | 10 |
| 8 | CAT7 | INNER RACE | 2 |
| 9 | YWFL24010 | WASHER, FLAT, SAE 3/4, PLAIN | 2 |
| 10 | YNSL24010 | NUT SLOT, 3/4-16 NA G2 NF | 2 |
| 11 | CAT6 | BEARING | 2 |
| 12 | YPCT05010 | COTTER PIN, 5/32 X 1-1/2 | 2 |
| 13 | YBFB12125 | BOLT FLANGE, 3/8 X 1-1/4 G5 | 2 |
| 14 | YBFB12300 | BOLT FLANGE, 3/8 X 3 G5 | 4 |
| 15 | YNWL16005 | NUT WHEEL, 1/2-20 NA G5 ZC | 10 |
| 16 | BFR275 | RACE | 2 |
| 17 | YNFG12006 | NUT FLANGE, 3/8 GF | 6 |
| 18 | RG51 | ZERK, 90 DEGREE 1/4-28 | 2 |
| 19 | CAT8 | HUB, 545, 5 BOLT, 1250 LBS, WITH RACES | 2 |
| 20 | 10WR49 | GROUND WHEEL HUB W/CUPS | 2 |
| 21 | 8605SR | 205/75D15 LRC BIAS TIRE ON 15X5 SILVER WHEEL | 2 |
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Manufactured By:
H&S MANUFACTURING CO., INC.

2608 S. HUME AVE. MARSHFIELD, WI 54449
(715) 387-3414 | hsmfgco.com

