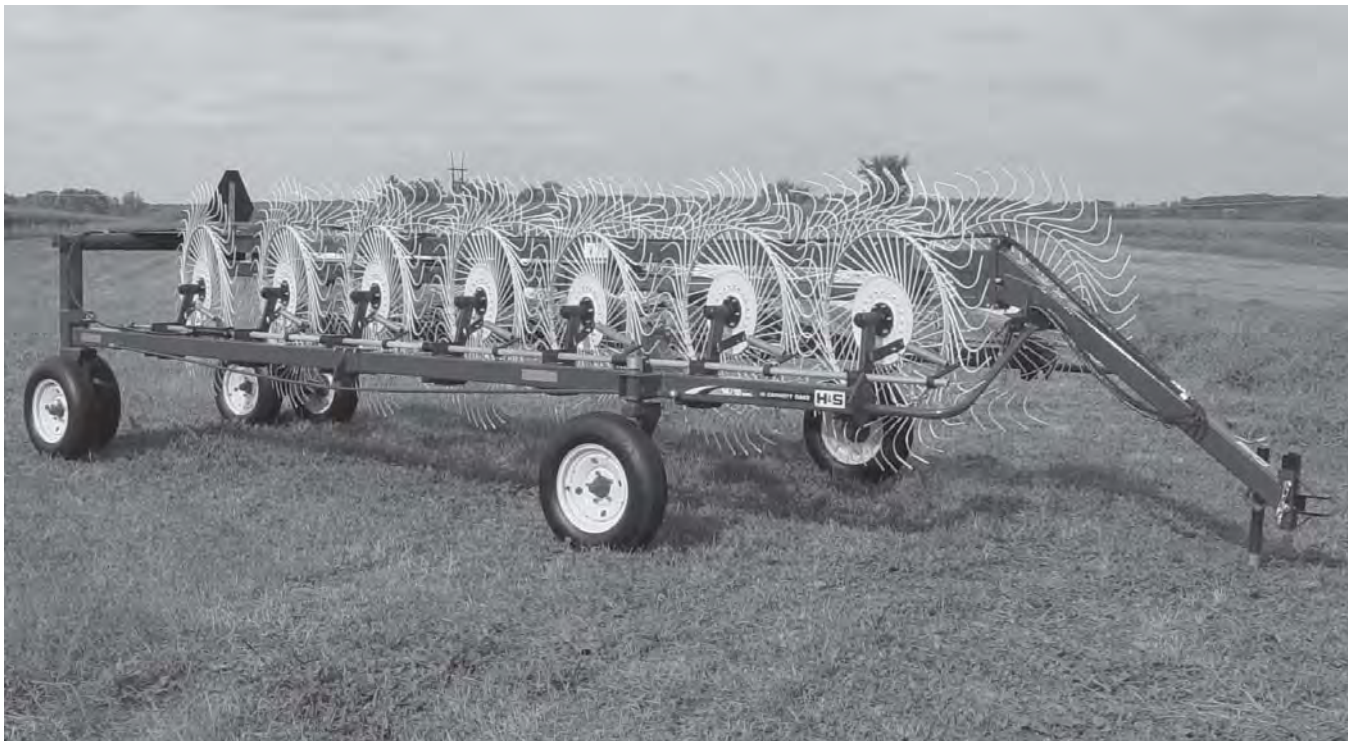




HC4112 RAKE

PARTS BOOK



Revision #02
Starting Ser.716140

Part #75479
HSMFG0317

Manufactured By
H&S MANUFACTURING CO., INC.

P.O. BOX 768 (715) 387-3414 FAX (715) 384-5463
MARSHFIELD, WISCONSIN 54449

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INSTRUCTIONS FOR ORDERING PARTS

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

1. Model & Serial number is located on the left, rear main frame of your unit.
2. All reference to left or right apply to the machine as viewed from the rear.
3. Parts should not be ordered from illustration only. Please order by complete part number.
4. 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)

| | |
|------------------------------|----------------------|
| H&S MFG. CO. INC. | |
| MARSHFIELD, WIS. | |
| MOD. NO. | <input type="text"/> |
| SER. NO. | <input type="text"/> |
| DESCR. | <input type="text"/> |

PLEASE RECORD NUMBERS FOR YOUR UNIT FOR QUICK REFERENCE

ABOUT IMPROVEMENTS

H&S IS CONTINUALLY STRIVING TO IMPROVE IT'S 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

MAIN FRAME REAR

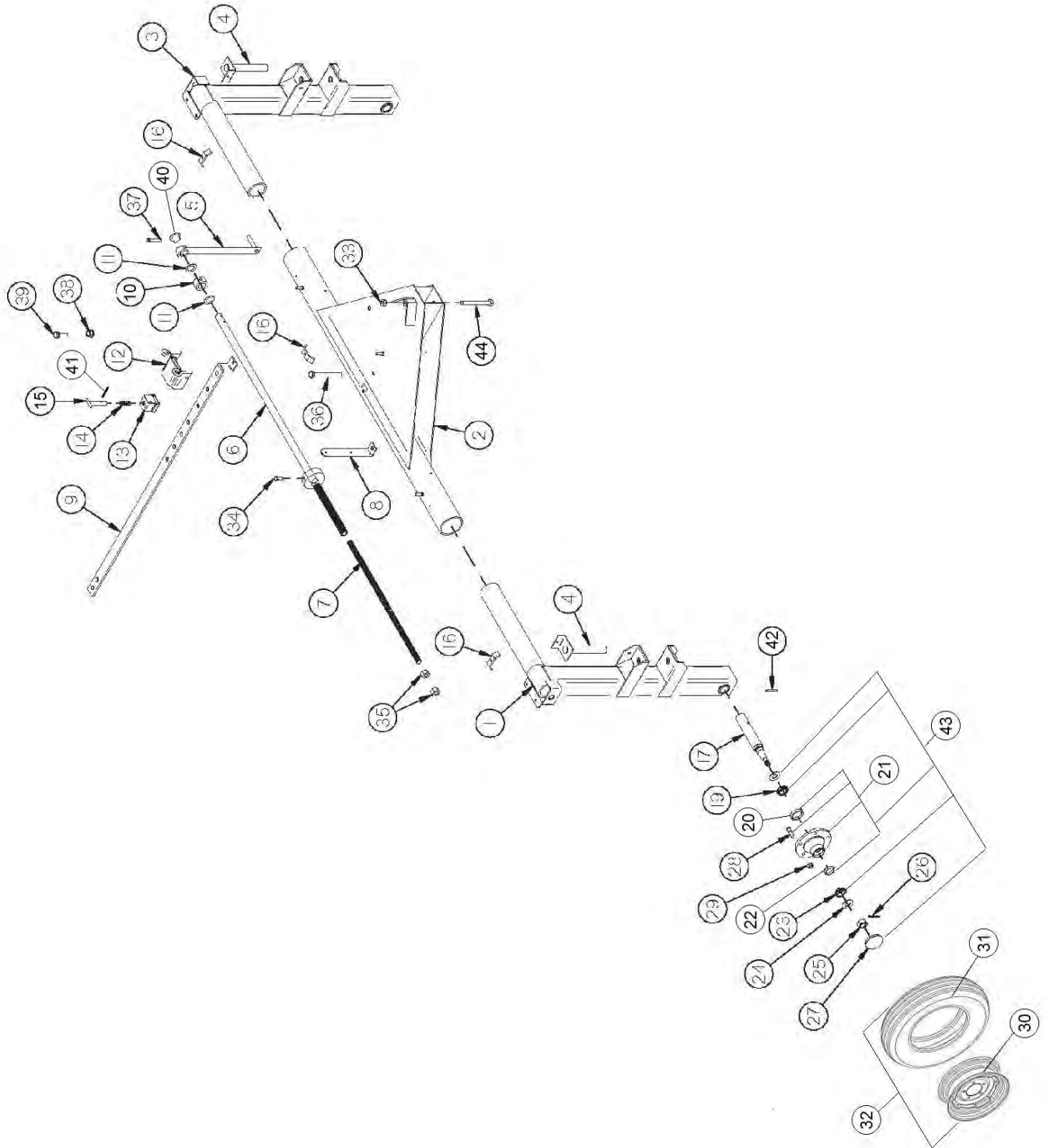


FIGURE 1

MAIN FRAME REAR

| <u>ITEM</u> | <u>PART#</u> | <u>DESCRIPTION</u> |
|-------------|--------------|---|
| 1 | BFR754 | RIGHT AXLE UPRIGHT |
| 2 | BFR498 | REAR PIVOT ASSEMBLY |
| 3 | BFR755 | LEFT AXLE UPRIGHT |
| 4 | BFR756 | BEAM PIVOT SHAFT |
| 5 | BFR423 | WIDTH ADJUSTMENT HANDLE |
| 6 | BFR485 | REAR WIDTH ADJUSTMENT TUBE |
| 7 | BFR420 | REAR WIDTH ADJUSTMENT ROD |
| 8 | BFR649 | SMV BRACKET |
| 9 | BFR611 | WIDTH ADJUSTMENT BAR |
| 10 | BFR422 | WIDTH ADJUSTMENT COLLAR |
| 11 | BFR523 | POLY WASHER |
| 12 | BFR613 | WIDTH ADJUSTMENT STOP |
| 13 | BFR239 | SLEEVE ADJUSTABLE LOCK |
| 14 | BFR240 | SPRING |
| 15 | BFR241 | ADJUSTMENT HANDLE |
| 16 | 23N67 | HOSE HOLDER |
| 17 | BFR449 | SPINDLE |
| 18 | 60699 | GREASE SEAL |
| 19 | 17G145 | TAPERED ROLLER BEARING, 1.249 BORE |
| 20 | 17G146 | OUTER RACE |
| 21 | BFR60 | HUB |
| 22 | BFR61 | OUTER RACE |
| 23 | BFR62 | OUTER BEARING |
| 24 | YWFL24010 | WASHER, FLAT, SAE 3/4, PLAIN |
| 25 | YNLSL24010 | HEX NUT, SLOTTED, 3/4"-16 |
| 26 | YPCT05010 | COTTER PIN, 5/32" X 1-1/2" |
| 27 | BFR66 | HUB CAP |
| 28 | YBSD16005 | STUD BOLT, 1/2"-20 UNF X 1-7/8" (3/8" SHOULDER) |
| 29 | YNWL16005 | WHEEL NUT, 1/2"-20 UNF |
| 30 | BFR67 | WHEEL 5 X 15 |
| 31 | BFR128 | 670 X 15 TIRE 6-PLY |
| 32 | 32006 | 6.70-15 TIRE ON 5" X 15" WHEEL |
| 33 | YNHX20005 | HEX NUT, 5/8"-11 PLATED |
| 34 | YBHH16010 | BOLT, 1/2" X 1" GR. 5 |
| 35 | YNAC24005 | HEX NUT, ACME, 3/4"-6 |
| 36 | YBHH20085 | BOLT, 5/8" X 5" GR. 5 |
| 37 | YBHH12090 | BOLT, 3/8" X 2-1/2" GR. 5 |
| 38 | BFR642 | WIDTH ADJUSTMENT SPACER |
| 39 | YSHW10010 | 5/16"-18 X 1-1/4" HEX WASHER SLOT TYPE F ZINC |
| 40 | BFR636 | PLASTIC PIPE CAP - 11 CAP PLUG |
| 41 | YPCT05020 | COTTER PIN, 5/32 X 1-3/4 |
| 42 | YPEX12025 | EXPANSION PIN, 3/8" X 2-3/4" |
| 43 | BFR75 | HUB ASSY, GROUND WHEEL |
| 44 | YBHH20107 | BOLT, 5/8" X 7-1/2" GR. 5 |

FIGURE 2

MAIN FRAME POLE AND LINKAGE

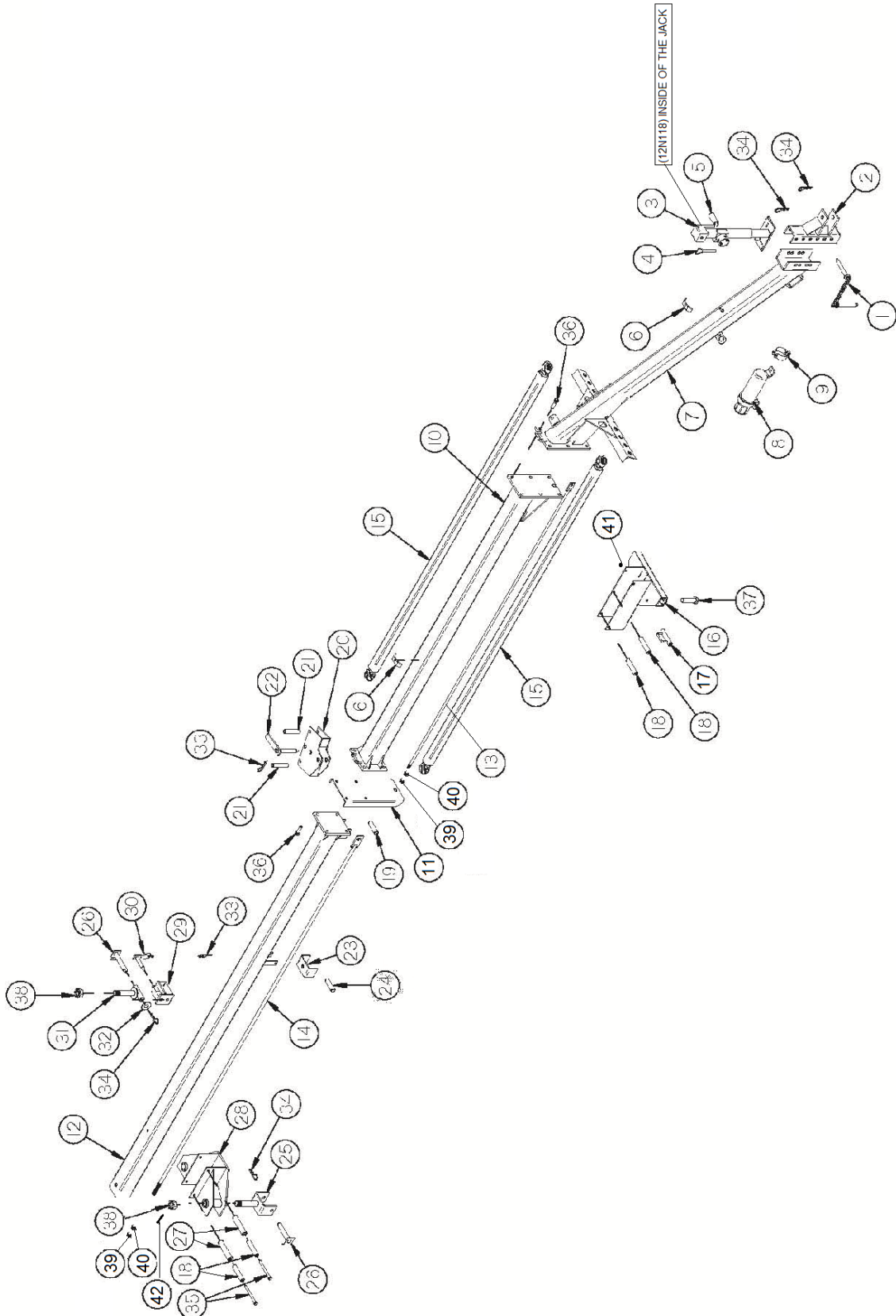


FIGURE 2

MAIN FRAME POLE AND LINKAGE

| <u>ITEM</u> | <u>PART#</u> | <u>DESCRIPTION</u> |
|-------------|--------------|----------------------------------|
| 1 | BFR450 | HITCH PIN |
| 2 | BFR157 | HITCH |
| 3 | BFR753 | JACK |
| 4 | 12N117 | JACK PIN & CHAIN |
| 5 | 5N78 | JACK HANDLE |
| * | 12N118 | REPLACEMENT BEARING |
| 6 | HE42 | HOSE HOLDER |
| 7 | BFR660 | POLE |
| 8 | S522 | MANUAL HOLDER |
| 9 | S523 | MANUAL CLAMP - LARGE |
| 10 | BFR385 | CENTER POLE SECTION |
| 11 | BFR399 | LINKAGE STOP |
| 12 | BFR397 | BACK POLE SECTION |
| 13 | BFR502 | FRONT ROD |
| 14 | BFR503 | BACK ROD |
| 15 | BFR390 | FRONT LINKAGE |
| 16 | BFR387 | FRONT LINKAGE SLIDER |
| 17 | BFR388 | HOSE GUIDE SPACER |
| 18 | BFR389 | SLIDER SPACER |
| 19 | BFR396 | CYLINDER PIN |
| 20 | BFR398 | CENTER SLIDER |
| 21 | BFR400 | CENTER SLIDER SPACER |
| 22 | BFR401 | CENTER SLIDER PIN |
| 23 | BFR402 | HOSE GUIDE |
| 24 | BFR634 | CYLINDER PIN |
| 25 | BFR410 | BACK LINKAGE YOKE RH |
| 26 | BFR413 | PIVOT YOKE SHAFT PIN |
| 27 | BFR404 | BACK SLIDER ROLLER |
| 28 | BFR440 | BACK LINKAGE SLIDER |
| 29 | BFR411 | BACK LINKAGE YOKE LH |
| 30 | BFR412 | BACK LINKAGE YOKE PIN |
| 31 | BFR414 | LEFT PIVOT YOKE SHAFT |
| 32 | BFR441 | STOP WASHER |
| 33 | YPHR02010 | HAIR PIN, #21-07 |
| 34 | YPHR06040 | HAIR PIN, 3/16" X 3-3/4" |
| 35 | YBHH16160 | BOLT, 1/2" X 5-1/2" GR. 5 |
| 36 | YBHH20025 | BOLT, 5/8" X 2" GR. 5 |
| 37 | YBHH32010 | BOLT, 1"-8 X 3-1/2" GR. 5 |
| 38 | YNSL36005 | HEX NUT, SLOTTED, 1-1/4"-12 |
| 39 | YNHX24010 | HEX NUT, 3/4-16 |
| 40 | YNSF24006 | HEX NUT, SERRATED FLANGE 3/4"-16 |
| 41 | YNHX16005 | NUT, HEX, 1/2-13, NA, A, ZC |
| 42 | YPCT05025 | COTTER PIN, 5/32 X 2 |

NOTE: * MEANS NOT SHOWN

FIGURE 3 RAKE BEAM AND ARMS

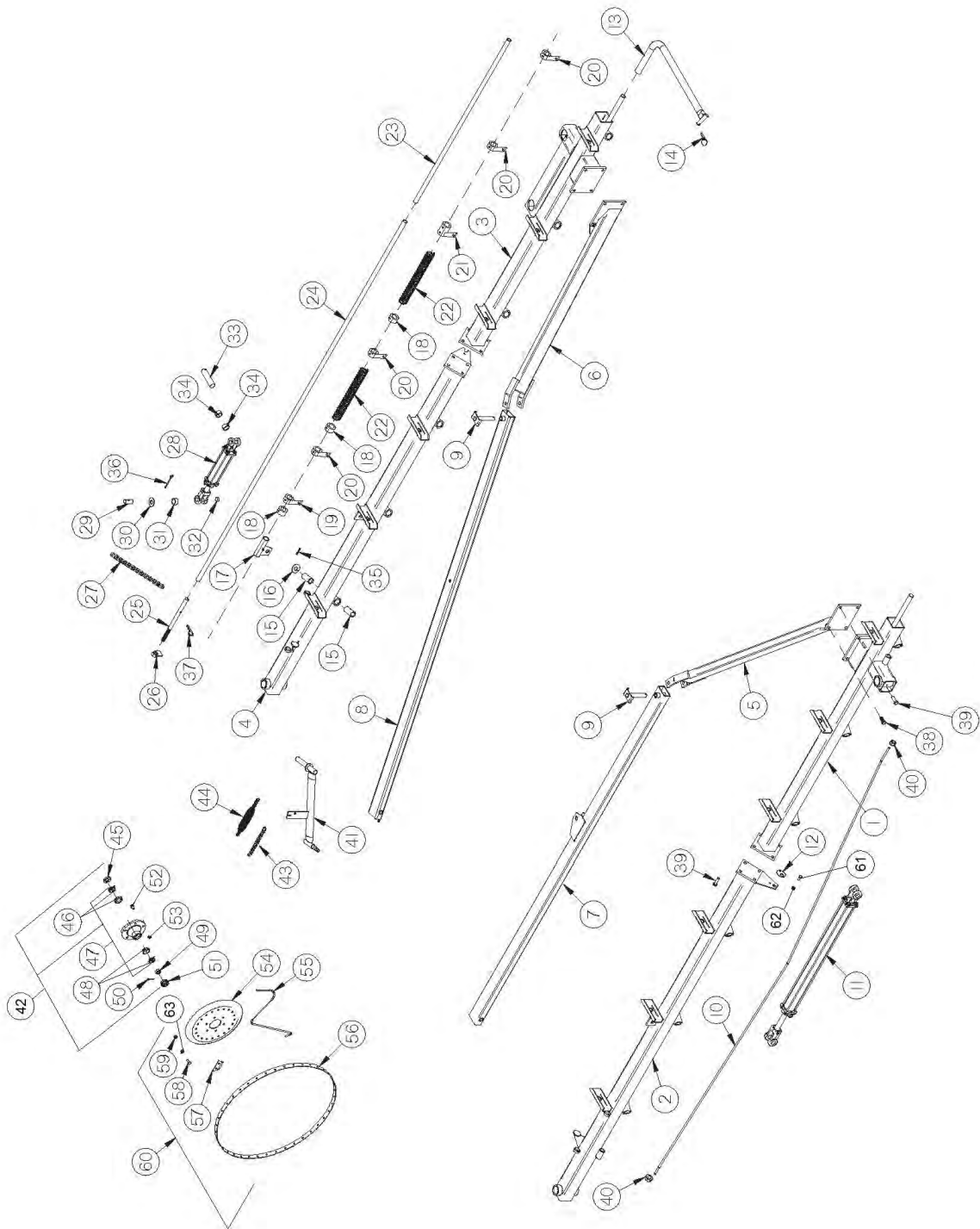


FIGURE 3

RAKE BEAMS AND ARMS

| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|-------------|---------------|----------------------------------|
| 1 | BFR406 | FRONT RAKE BEAM RH |
| 2 | BFR758 | BACK RAKE BEAM RH |
| 3 | BFR407 | FRONT RAKE BEAM LH |
| 4 | BFR759 | BACK RAKE BEAM LH |
| 5 | BFR391 | RAKE BEAM ARM RH |
| 6 | BFR392 | RAKE BEAM ARM LH |
| 7 | BFR394 | RIGHT REAR LINKAGE |
| 8 | BFR395 | LEFT REAR LINKAGE |
| 9 | BFR393 | RAKE BEAM ARM PIN |
| 10 | BFR612 | SIDE ARM STABILIZER ROD |
| 11 | 56004 | HYDRAULIC CYLINDER |
| 12 | DF22 | WASHER |
| 13 | BFR384 | TRANSPORT LOCK PIPE LH |
| * | BFR415 | TRANSPORT LOCK PIPE RH |
| 14 | YPLY12010 | LYNCH PIN, 3/8" X 1-3/4" |
| 15 | BFR425 | RAKE ARM BUSHING W/ FLANGE |
| 16 | BFR229 | RAKE ARM WASHER |
| 17 | BFR428 | HYDRAULIC CYLINDER END SLIDE LH |
| * | BFR429 | HYDRAULIC CYLINDER END SLIDE RH |
| 18 | BFR82 | PIPE CLAMPS |
| 19 | BFR622 | SPRING BRACKET (2 HOLE) |
| 20 | BFR431 | LH SPRING BRACKET |
| * | BFR430 | RH SPRING BRACKET |
| 21 | BFR432 | LH LIFTING PIPE CONNECTOR |
| * | BFR433 | RH LIFTING PIPE CONNECTOR |
| 22 | BFR84 | COMPRESSION SPRING |
| 23 | BFR520 | LIFTING PIPE FRONT |
| 24 | BFR519 | LIFTING PIPE BACK |
| 25 | BFR427 | RAKE ARM LOCK-UP SHAFT |
| 26 | BFR426 | RAKE PRESSURE HANDLE |
| 27 | BFR111 | BACK RAKE ARM ADJUSTMENT CHAIN |
| 28 | 55999 | HYDRAULIC LIFT CYLINDER CYLINDER |
| 29 | BFR517 | PIN |
| 30 | 16SV136 | WASHER |
| 31 | K106 | CYLINDER SPACER |

NOTE: * MEANS NOT SHOWN

FIGURE 3 RAKE BEAMS AND ARMS

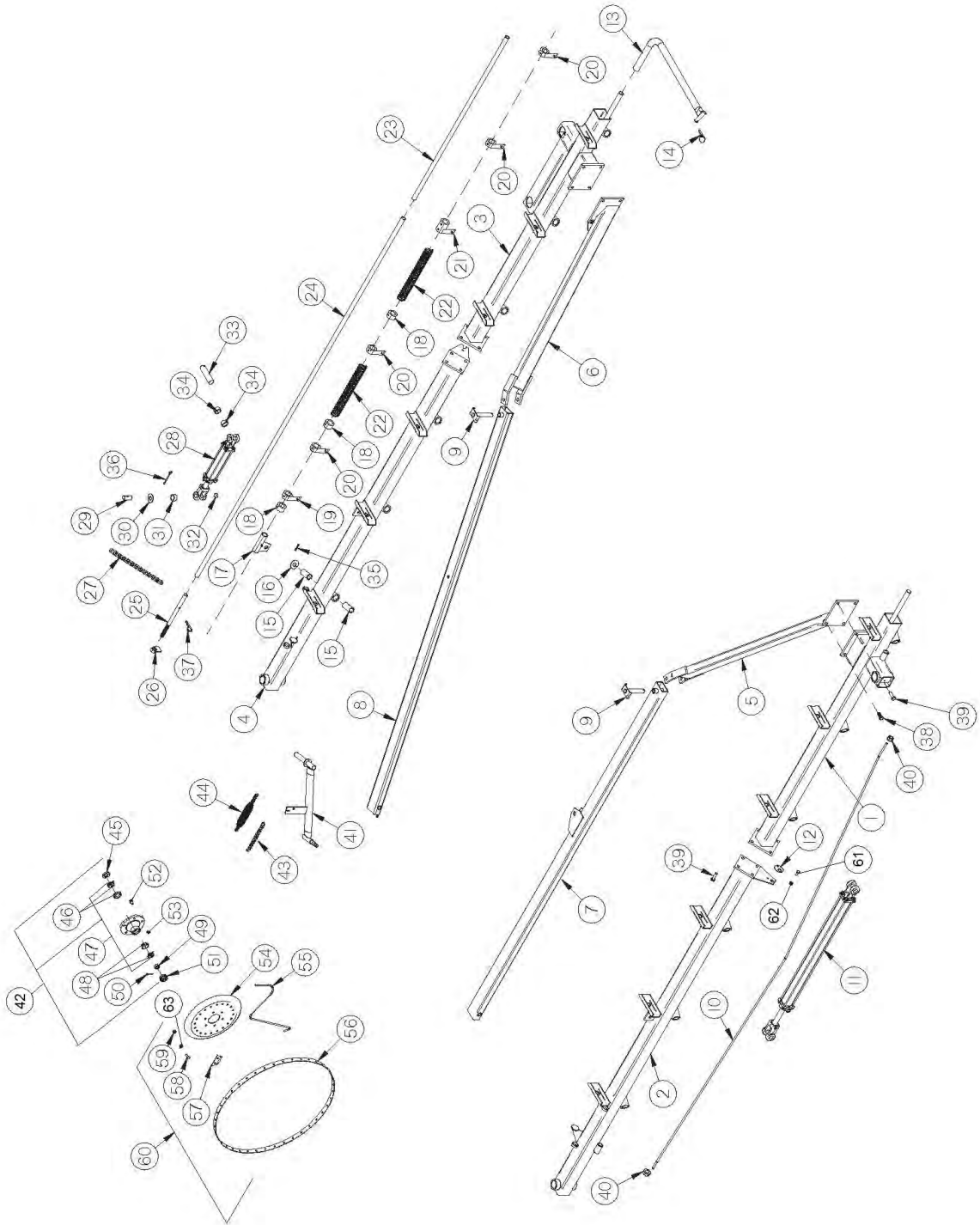


FIGURE 3

RAKE RAKE BEAMS AND ARMS

| <u>ITEM</u> | <u>PART#</u> | <u>DESCRIPTION</u> |
|-------------|--------------|---------------------------------|
| 32 | BFR506 | NYLON WEAR BLOCK |
| 33 | T143 | CYLINDER PIN |
| 34 | X94 | CYLINDER SPACERS EXPANSION |
| 35 | YPEX10015 | PIN, 5/16" X 1-3/4" COTTER PIN, |
| 36 | YPCT07005 | 7/32" X 2 " |
| 37 | YPHR08040 | HAIR PIN, 1/4" X 5" |
| 38 | YBHH20020 | BOLT, 5/8" X 1-3/4" GR. 5 |
| 39 | YBHH20025 | BOLT, 5/8" X 2" GR. 6 |
| 40 | YNFG24005 | HEX NUT, FLANGED-LOCK, 3/4"-10 |
| 41 | BFR436 | RAKE ARM LH |
| * | BFR437 | RAKE ARM RH |
| 42 | 1081 | RAKE WHEEL HUB AND SPINDLE |
| 43 | BFR140 | RAKE ARM ADJUSTMENT CHAIN |
| 44 | BFR138 | RAKE ARM SPRING |
| 45 | T163 | SEAL |
| 46 | 600012 | INNER BEARING & RACE |
| 47 | BFR32 | RAKE WHEEL HUB |
| 48 | 600014 | OUTER BEARING & RACE |
| 49 | YNSL24010 | HEX NUT, SLOTTED, 3/4"-16 |
| 50 | YPCT05010 | COTTER PIN, 5/32" X 1-1/2" |
| 51 | T173 | HUB CAP |
| 52 | YBHH76005 | BOLT, 10MM X 25MM |
| 53 | YNHX76015 | HEX NUT, 10MM |
| 54 | T179 | RAKE WHEEL CENTER |
| 55 | T176 | RAKE WHEEL TOOTH |
| 56 | T177 | OUTER RING |
| 57 | T178 | RAKE TOOTH CLIP |
| 58 | YBCR76005 | CARR. BOLT, 10MM X 25MM 10MM |
| 59 | YNCL76005 | TOP LOCK NUT |
| 60 | T174 | RAKE WHEEL LH |
| * | BFR31 | RAKE WHEEL RH |
| 61 | YBHH10010 | BOLT, HEX, 5/16-18 X 1, G5, ZC |
| 62 | YWFLO10005 | WASHER, LOCK 5/16 |
| 63 | YWLO76015 | WASHER, LOCK, M10 |

NOTE: * MEANS NOT SHOWN

FIGURE 4 GAUGE WHEEL

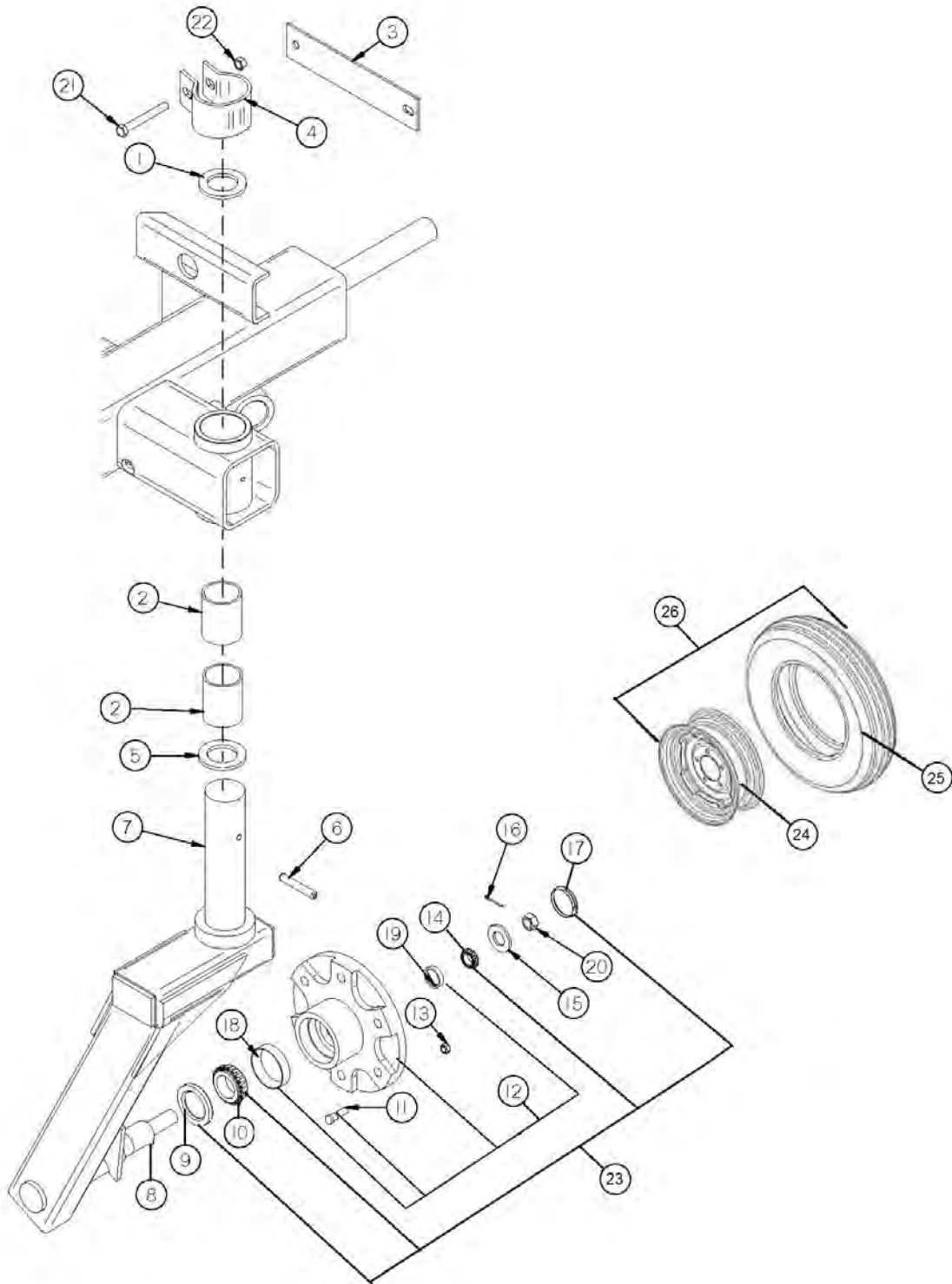


FIGURE 4

GAUGE WHEEL

| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|-------------|---------------|---|
| 1 | BFR309 | GAUGE WHEEL WASHER |
| 2 | RG26 | BUSHING, BRONZE, GAUGE WHEEL |
| 3 | BFR310 | BRAKE PAD (2) |
| 4 | BFR311 | BRAKE COLLAR |
| 5 | RG24 | BRONZE WASHER |
| 6 | YPEX10025 | EXPANSION PIN, 5/16" X 2-3/4" |
| 7 | BFR312 | COMPLETE FORK RH |
| * | BFR316 | COMPLETE FORK LH |
| 8 | BFR56 | SPINDLE |
| 9 | 60699 | GREASE SEAL |
| 10 | 17G145 | TAPERED ROLLER BEARING, 1.249 BORE |
| 11 | YBSD16005 | STUD BOLT, 1/2"-20 UNF X 1-7/8" (3/8" SHOULDER) |
| 12 | BFR60 | HUB WITH RACES |
| 13 | YNWL16005 | WHEEL NUT, 1/2"-20 UNF |
| 14 | BFR62 | OUTER BEARING |
| 15 | YWFL24010 | WASHER, FLAT, 3/4" USS |
| 16 | YPCT05010 | COTTER PIN, 5/32" X 1-1/2" |
| 17 | BFR66 | HUB CAP |
| 18 | 17G146 | OUTER RACE |
| 19 | BFR61 | OUTER RACE |
| 20 | YNSL24010 | HEX NUT, SLOTTED, 3/4"-16 |
| 21 | YBHH12125 | BOLT, 3/8" X 3" GR. 5 FULL THREAD |
| 22 | YNHX12005 | HEX NUT, 3/8"-16 |
| 23 | BFR75 | COMPLETE HUB FOR GROUND WHEEL |
| 24 | BFR67 | WHEEL 5 X 15 |
| 25 | BFR128 | 6.70 X 15 TIRE |
| 26 | 32006 | 6.70-15 TIRE ON 5" X 15" WHEEL |

NOTE: * MEANS NOT SHOWN

FIGURE 5
RAKE HYDRAULICS

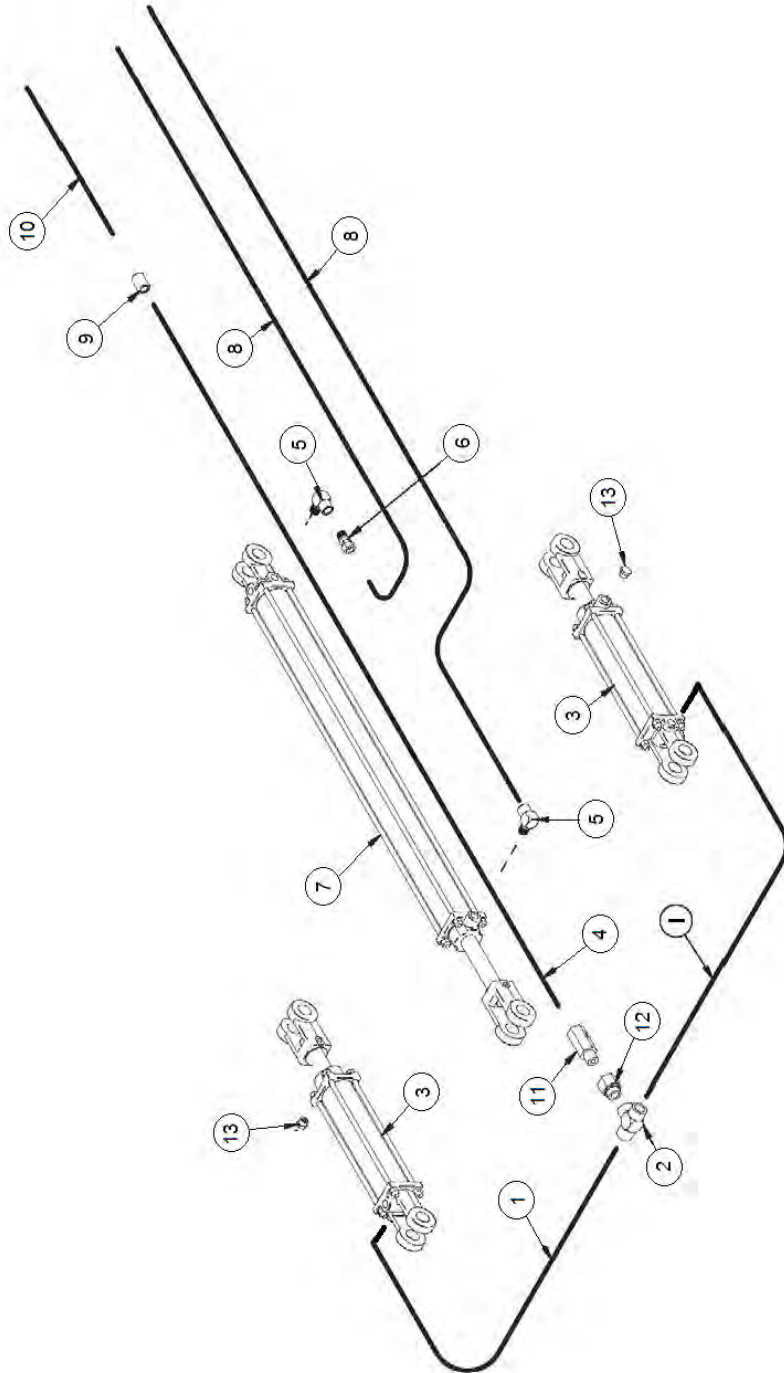
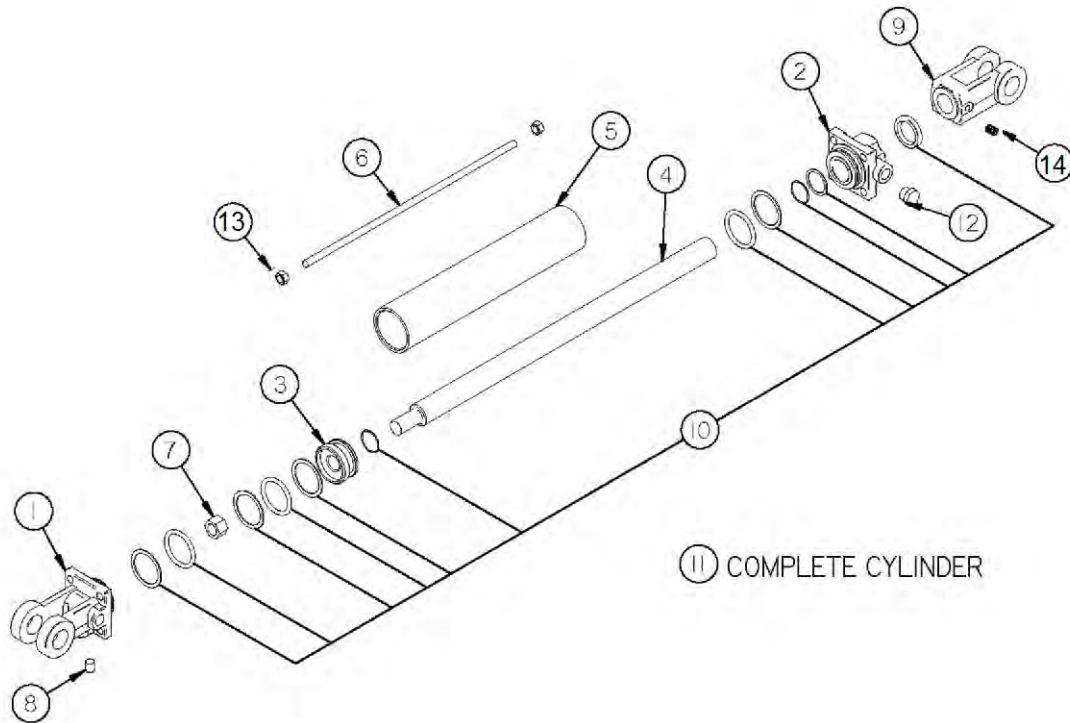


FIGURE 5
RAKE HYDRAULICS

| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|--------------------|----------------------|-------------------------------|
| 1 | 37N60 | 108" HOSE |
| 2 | BFR74 | 3/8" FEMALE TEE |
| 3 | 55999 | HYDRAULIC LIFT CYLINDER |
| 4 | 23N302 | 264" HOSE |
| 5 | 23N234 | 3/8" STREET ELBOW |
| 6 | 58723 | MALE ADAPTER UNION W/ ORIFICE |
| 7 | 56004 | HYDRAULIC OPEN CYLINDER |
| 8 | BFR621 | 256" HOSE |
| 9 | HE60 | 3/8" PIPE COUPLER |
| 10 | BFR448 | 66" HOSE |
| 11 | BFR554 | FLOW VALVE |
| 12 | BFR555 | ADAPTER |
| 13 | BFR70 | VENT PLUG |

FIGURE 6

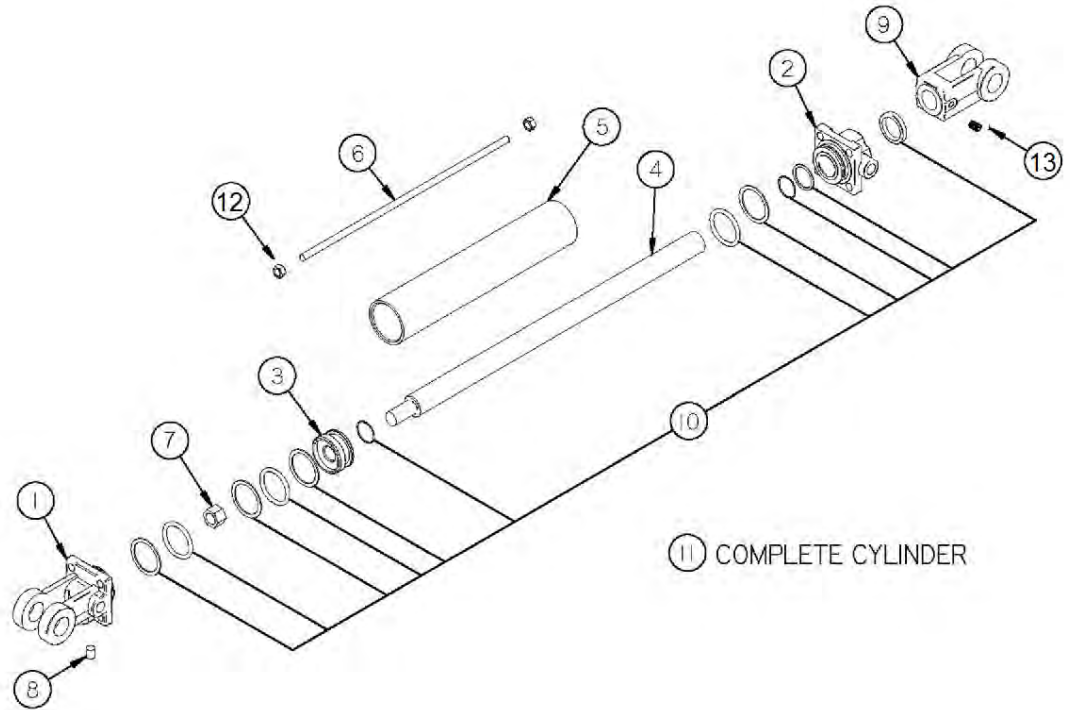
HYDRAULIC LIFT CYLINDER



| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|-------------|---------------|---------------------------------|
| 1 | 23N142A | CLEVIS CAP |
| 2 | 56174 | ROD CAP |
| 3 | 56180 | PISTON |
| 4 | T184A | ROD |
| 5 | BFR68 | CYLINDER TUBE |
| 6 | T186 | TIE ROD |
| 7 | 23N148 | PISTON NUT |
| 8 | 23N149 | PLUG |
| 9 | 23N150A | ROD CLEVIS |
| 10 | 56187 | SEAL KIT |
| 11 | 55999 | COMPLETE CYLINDER |
| 12 | BFR70 | VENT PLUG |
| 13 | YNHX12006 | NUT, HEX, 3/8-24, NA, G2, ZC |
| 14 | YSSO12015 | SET SCREW, SOCKET, 3/8-24 X 3/8 |

FIGURE 7

OPENING CYLINDER



| ITEM | PART# | DESCRIPTION |
|-------------|--------------|---------------------------------|
| 1 | 23N142A | CLEVIS CAP |
| 2 | 56174 | ROD CAP |
| 3 | 56180 | PISTON |
| 4 | BFR654 | ROD |
| 5 | BFR655 | CYLINDER TUBE |
| 6 | BFR656 | TIE ROD |
| 7 | 23N148 | PISTON NUT |
| 8 | 23N149 | PLUG |
| 9 | 23N150A | ROD CLEVIS |
| 10 | 56187 | SEAL KIT |
| 11 | 56004 | COMPLETE CYLINDER |
| 12 | YNHX12006 | NUT, HEX, 3/8-24,NA,G2,ZC |
| 13 | YSSO12015 | SET SCREW, SOCKET, 3/8-24 X 3/8 |

FIGURE 8
OPTIONAL 2 WHEEL CENTER KICKER WHEEL

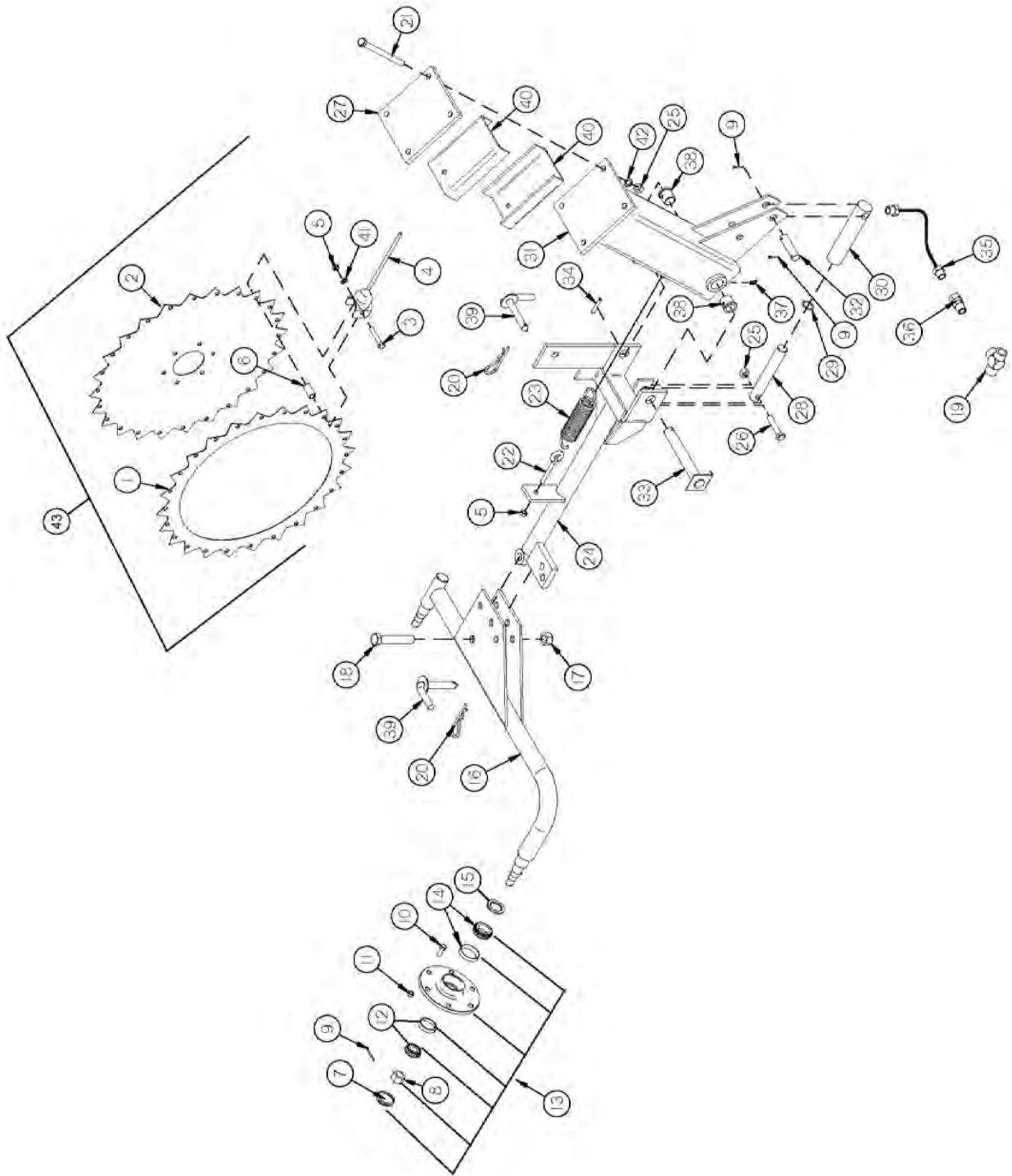


FIGURE 8

OPTIONAL 2 WHEEL CENTER KICKER WHEEL

| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|-------------|---------------|---------------------------------------|
| 1 | BFR369 | RAKE WHEEL RING |
| 2 | BFR370 | RAKE WHEEL CENTER |
| 3 | YBHH12100 | BOLT, 3/8" X 2-1/4" GR. 5 |
| 4 | T82 | RAKE WHEEL TOOTH |
| 5 | YNL12005 | HEX NUT, TOP LOCK, 3/8"-16 |
| 6 | BFR371 | RAKE WHEEL SPACER |
| 7 | T173 | HUB CAP |
| 8 | YNL24010 | HEX NUT, SLOTTED, 3/4"-16 |
| 9 | YPCT05010 | COTTER PIN, 5/32" X 1-1/2" |
| 10 | YBHH76005 | BOLT, 10MM X 25MM |
| 11 | YNHX76015 | HEX NUT, 10MM |
| 12 | 600014 | OUTER BEARING RACE |
| 13 | 1081 | RAKE WHEEL HUB AND SPINDLE |
| 14 | 600012 | INNER BEARING RACE |
| 15 | T163 | SEAL |
| 16 | BFR511 | CENTER KICKER WHEEL ARM |
| 17 | YNL24005 | HEX NUT, TOP LOCK, 3/4"-10 |
| 18 | YBHH24050 | BOLT, 3/4" X 3" GR. 5 |
| 19 | BFR74 | 3/8" PIPE TEE |
| 20 | YPHR02010 | HAIR PIN, #21-07 |
| 21 | YBHH16175 | BOLT, 1/2" X 6-1/2" GR. 5 |
| 22 | YBTE12025 | TURNT EYE BOLT, 3/8" X 3" FULL THREAD |
| 23 | BR62 | SPRING |
| 24 | BFR512 | CENTER KICKER WHEEL PIVOT |
| 25 | YNL16005 | HEX NUT, TOP LOCK, 1/2"-13 |
| 26 | YBHH16080 | BOLT, 1/2" X 2-1/2" GR. 5 |
| 27 | BFR513 | KICKER WHEEL MOUNT |
| 28 | BFR114 | PISTON |
| 29 | BFR115 | O-RING |
| 30 | BFR116 | HYDRAULIC CYLINDER |
| 31 | BFR514 | KICKER WHEEL OFFSET |
| 32 | BFR515 | CYLINDER PIN |
| 33 | BFR379 | AXLE SHAFT |
| 34 | YPEX10015 | EXPANSION PIN, 5/16" X 1-3/4" |
| 35 | BFR121 | HOSE |
| 36 | 58720 | 3/8 MALE ADPTER WITH .022 ORIFICE |
| 37 | RG21 | GREASE ZERK, 45 DEGREE |
| 38 | BFR27 | BUSHING |
| 39 | BFR197 | LOCKING PIN |
| 40 | BFR516 | FILLER PLATE |
| 41 | YWLO12005 | WASHER, LOCK, 3/8" |
| 42 | YWLO16005 | WASHER, LOCK, 1/2" |
| 43 | BFR748 | COMPLETE WHEEL ASSEMBLY |

NOTE: * MEANS NOT SHOWN

FIGURE 9 OPTIONAL 3 WHEEL CENTER KICKER WHEEL

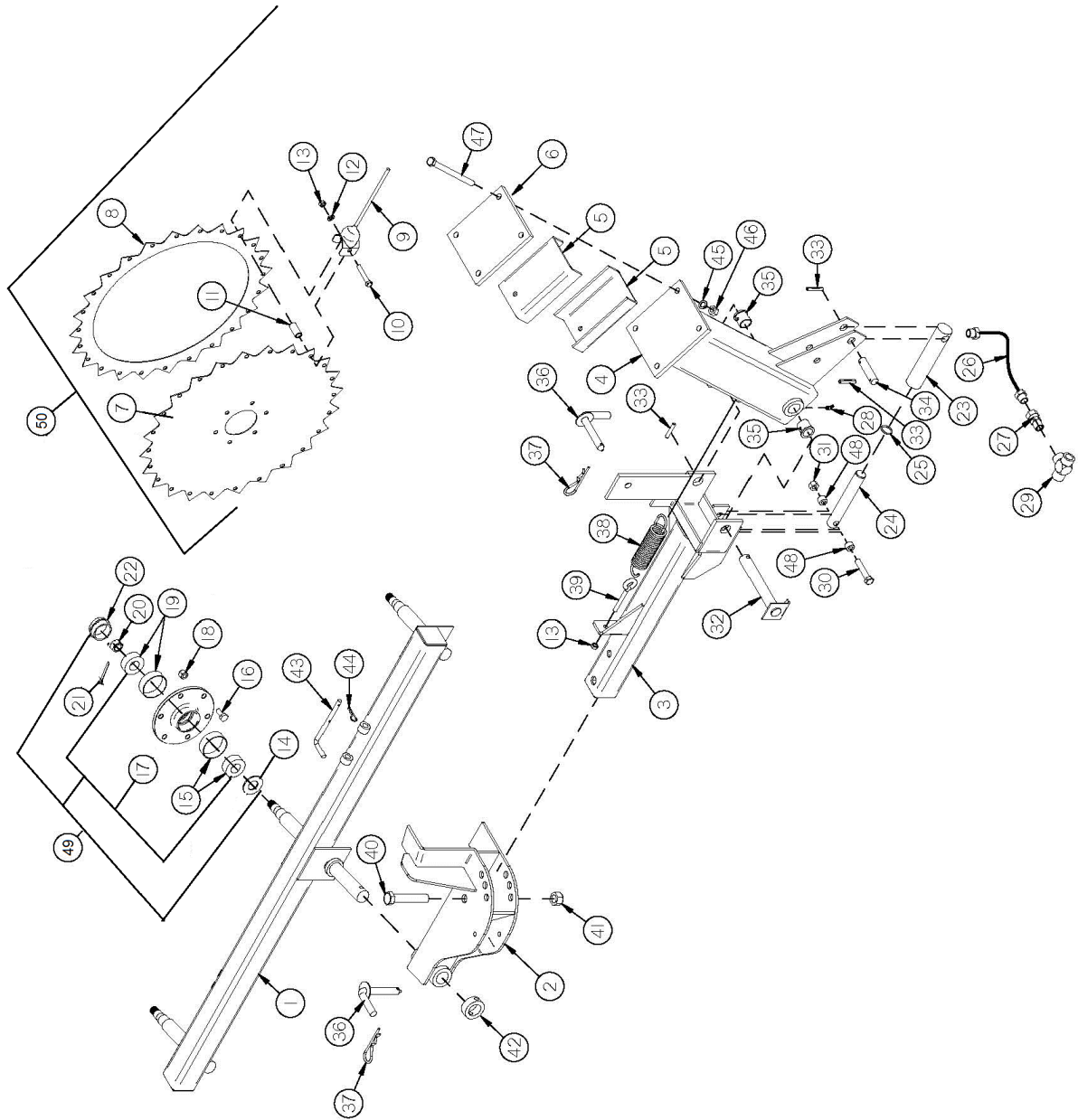


FIGURE 9

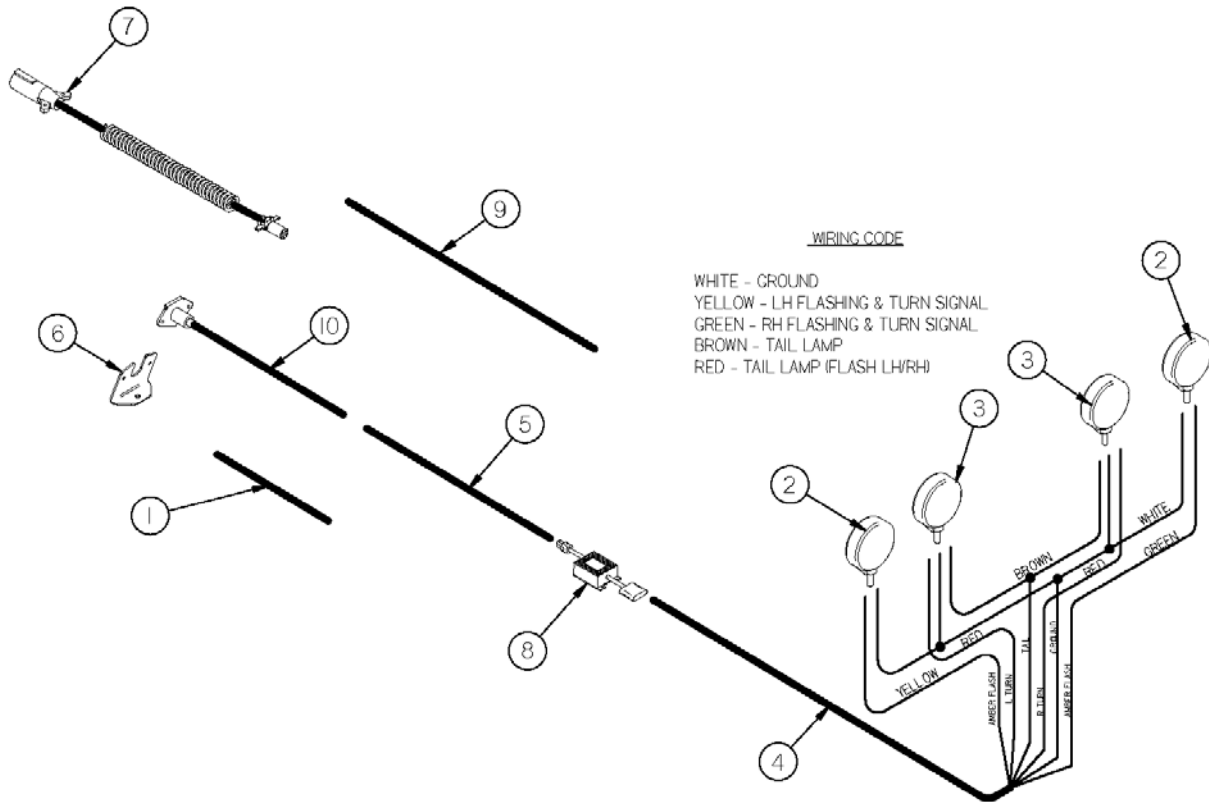
OPTIONAL 3 WHEEL CENTER KICKER WHEEL

| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|-------------|---------------|---|
| 1 | BFR717 | KICKER RAKE BEAM |
| 2 | BFR718 | PIVOT |
| 3 | BFR719 | SQUARE RAKE ARM |
| 4 | BFR514 | KICKER WHEEL OFFSET |
| 5 | BFR516 | FILLER PLATE |
| 6 | BFR513 | KICKER WHEEL MOUNT |
| 7 | BFR370 | RAKE WHEEL CENTER |
| 8 | BFR369 | RAKE WHEEL RING |
| 9 | T82 | RAKE WHEEL TOOTH BOLT, |
| 10 | YBHH12100 | 3/8" X 2-1/4" GR. 5 RAKE |
| 11 | BFR371 | WHEEL SPACER WASHER, |
| 12 | YWLO12005 | LOCK, 3/8" |
| 13 | YNTL12005 | HEX NUT, TOP LOCK, 3/8"-16 |
| 14 | T163 | SEAL |
| 15 | 600012 | INNER BEARING RACE |
| 16 | YBHH76005 | BOLT, 10MM X 25MM |
| 17 | BFR32 | RAKE WHEEL HUB |
| 18 | YNHX76015 | HEX NUT, 10MM |
| 19 | 600014 | OUTER BEARING RACE |
| 20 | YNSL24010 | HEX NUT, SLOTTED, 3/4"-16 |
| 21 | YPCT05010 | COTTER PIN, 5/32" X 1-1/2" |
| 22 | T173 | HUB CAP |
| 23 | BFR116 | HYDRAULIC CYLINDER |
| 24 | BFR114 | PISTON |
| 25 | BFR115 | O-RING |
| 26 | BFR121 | HOSE |
| 27 | 58720 | 3/8 MALE ADPTER WITH .022 ORIFICE |
| 28 | RG21 | GREASE ZERK, 45 DEGREE |
| 29 | BFR74 | 3/8" PIPE TEE |
| 30 | YBHH16115 | BOLT, 1/2" X 3-1/2" GR. 5 |
| 31 | YNTL16005 | HEX NUT, TOP LOCK, 1/2"-13 |
| 32 | BFR379 | AXLE SHAFT |
| 33 | YPEX10015 | EXPANSION PIN, 5/16" X 1-3/4" |
| 34 | BFR515 | CYLINDER PIN |
| 35 | BFR27 | BUSHING |
| 36 | BFR197 | LOCKING PIN |
| 37 | YPHR02010 | HAIR PIN, #21-07 |
| 38 | BR62 | SPRING |
| 39 | YBTE12025 | TURNED EYE BOLT, 3/8" X 3" FULL THREAD |
| 40 | YBHH24070 | BOLT, 3/4-10" X 4" GR. 5 |
| 41 | YNTL24005 | HEX NUT, TOP LOCK, 3/4"-10 |
| 42 | BFR720 | PIVOT LOCK COLLAR |
| 43 | BFR721 | BEAM LOCK PIN |
| 44 | YPHR02005 | HAIR PIN, #21-05 (1-7/8" LONG, 3/8-7/16" SHAFT) |
| 45 | YWLO16005 | WASHER, LOCK, 1/2" |
| 46 | YNTL16005 | HEX NUT, TOP LOCK, 1/2"-13 |
| 47 | YBHH16175 | BOLT, 1/2" X 6-1/2" GR. 5 |
| 48 | BFR722 | LIFT CYLINDER SPACER |
| 49 | BFR76 | COMPLETE HUB |
| 50 | BFR748 | COMPLETE WHEEL ASSEMBLY |

NOTE: * MEANS NOT SHOWN

FIGURE 10

OPTIONAL LIGHTS



| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|-------------|---------------|---|
| 1 | BFR666 | 16 WHEEL EXT. LIGHT HARNESS |
| 2 | DWM129 | AMBER LIGHT |
| 3 | BFR675 | RED LIGHT |
| 4 | BFR667 | LIGHT HARNESS (6 WIRE) |
| 5 | BFR705 | 14 WHEEL LIGHT HARNESS |
| 6 | BFR659 | MOUNTING BRACKET |
| 7 | TLPC | TRACTOR CORD (OPTIONAL) |
| 8 | 69908 | LIGHT MODULE |
| 9 | BFR668 | 12 WHEEL LIGHT HARNESS |
| 10 | BFR706 | FRONT PIGTAIL |
| * | BFR671 | 12 WHEEL COMP. LIGHT HARNESS LESS OPTIONAL CORD |
| * | BFR707 | 14 WHEEL COMP. LIGHT HARNESS LESS OPTIONAL CORD |
| * | BFR708 | 16 WHEEL COMP. LIGHT HARNESS LESS OPTIONAL CORD |

NOTE: * MEANS NOT SHOWN

FIGURE 11
OPTIONAL WIND GUARD KIT

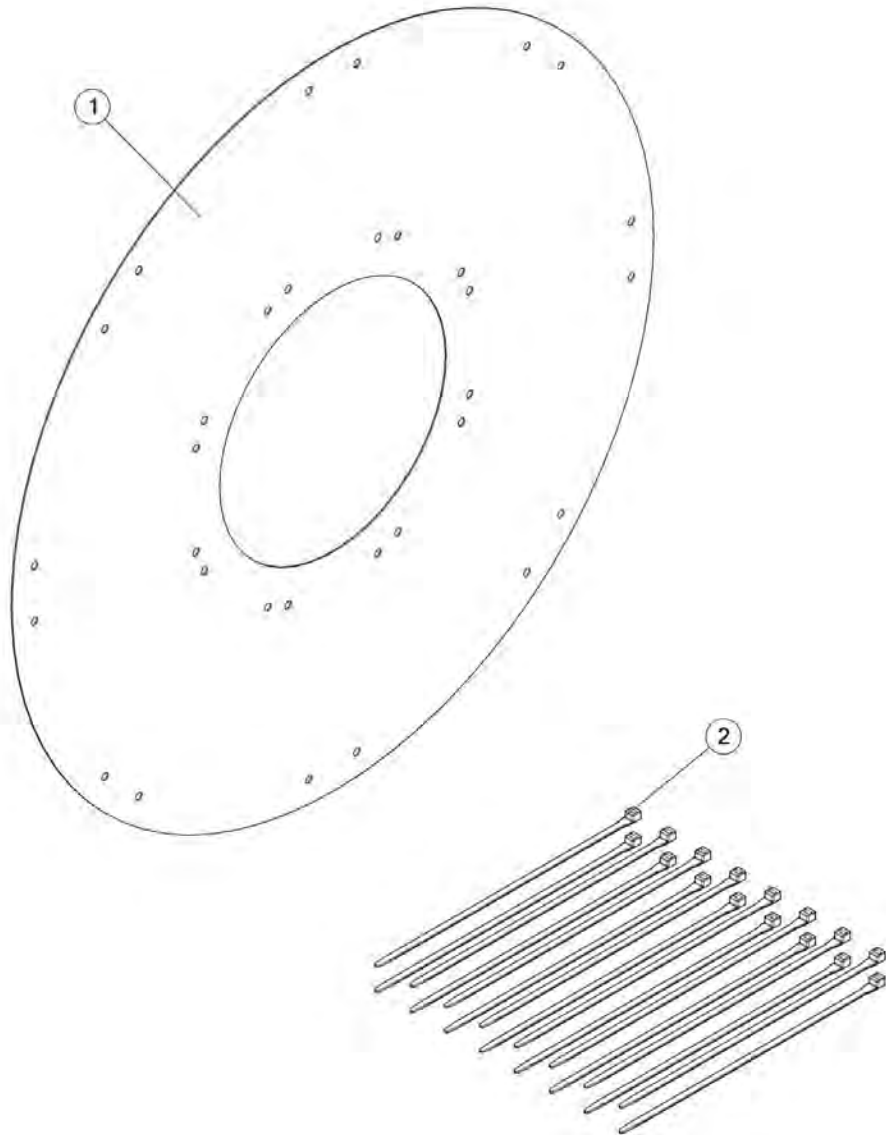


FIGURE 11
OPTIONAL WIND GUARD KIT

| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|--------------------|----------------------|-------------------------------------|
| 1 | 59040 | POLY WIND GAURD, FOR 55" RAKE WHEEL |
| 2 | 57626 | 15 INCH 120# BLACK CABLE TIE |

FIGURE 12
OPTIONAL TANDEM AXLE

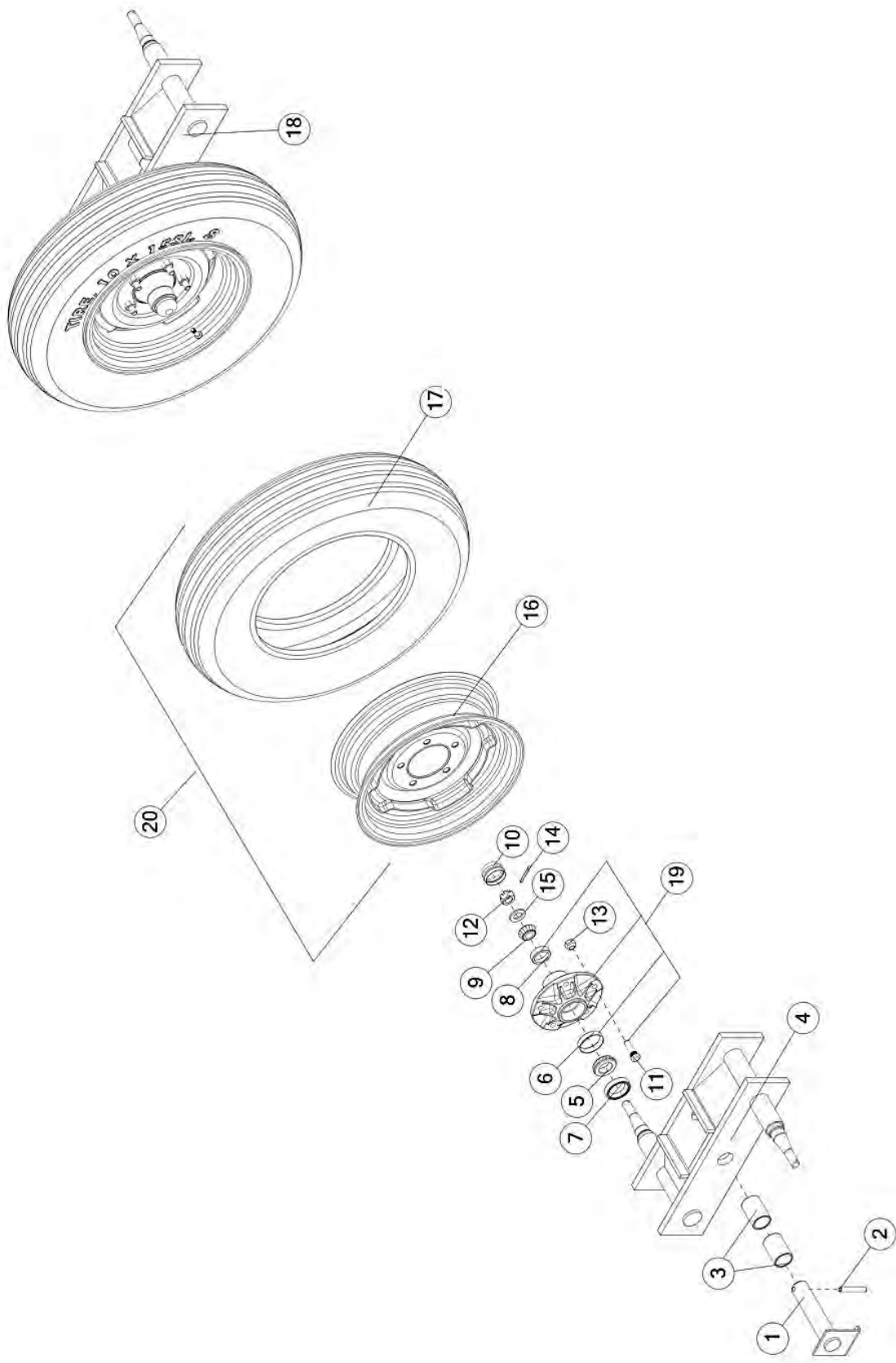


FIGURE 12

OPTIONAL TANDEM AXLE

| <u>ITEM</u> | <u>PART #</u> | <u>DESCRIPTION</u> |
|-------------|---------------|---|
| 1 | BFR524 | ASSY, TANDEM PIN |
| 2 | YPEX12025 | EXPANSION PIN, 3/8" X 2-3/4" |
| 3 | BFR625 | BUSHING, BRONZE, 1-3/4" X 1-1/2" X 2-1/2" |
| 4 | BFR509 | ASSY, RH TANDEM AXLE |
| 5 | 17G145 | TAPERED ROLLER BEARING, 1.249 BORE |
| 6 | 17G146 | OUTER RACE |
| 7 | 60699 | GREASE SEAL |
| 8 | BFR61 | OUTER RACE |
| 9 | BFR62 | OUTER BEARING |
| 10 | BFR66 | HUB CAP |
| 11 | YBSD16005 | BOLT, STUD, 1/2-20UNF X 1-7/8 X 3/8, G5, ZC |
| 12 | YNSL24010 | NUT, SLOT, 3/4-16, NA, G2, NF |
| 13 | YNWL16005 | NUT, WHEEL, 1/2-20, NA, G5, ZC |
| 14 | YPCT05010 | COTTER PIN 5/32" X 1-1/2" |
| 15 | YWFL24010 | WASHER, FLAT, SAE 3/4, PLAIN |
| 16 | BFR67 | WHEEL 5" X 15" 5 BOLT |
| 17 | BFR128 | 670 X 15 TIRE 6-PLY |
| 18 | BFR510 | LH TANDEM AXLE |
| 19 | BFR60 | HUB WITH RACES & STUDS |
| 20 | 32006 | 6.70-15 TIRE ON 5" X 15" WHEEL |

NOTE: * MEANS NOT SHOWN

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