



**61-SERIES**

**4505**

**PHILLIPS** **ROTARY**  
**HARROW**



PART NO. 61-PB-03  
PRINTING DATE: JAN 2021



# TABLE OF CONTENTS

## MAIN FRAME ASSEMBLY

|                                         |   |
|-----------------------------------------|---|
| HITCH ASSEMBLY .....                    | 3 |
| HOSE HANGER & HITCH JACK .....          | 3 |
| MAIN FRAME ASSEMBLY .....               | 4 |
| FRONT WING MOUNT & BRACES .....         | 5 |
| MAIN WHEEL ASSEMBLY .....               | 6 |
| MAIN WHEEL HUB & SPINDLE ASSEMBLY ..... | 7 |

## TAIL FRAME ASSEMBLY

|                                                               |       |
|---------------------------------------------------------------|-------|
| TAIL FRAME .....                                              | 10    |
| TAIL TOP BRIDGE .....                                         | 11    |
| TAIL CASTER WHEEL ASSEMBLY ( -2006) .....                     | 12-13 |
| HEAVY DUTY TAIL CASTER WHEEL ASSEMBLY (2007 to Present) ..... | 14-15 |
| TAIL LOCK ASSEMBLY .....                                      | 16    |
| TAIL TOOL CATCHER .....                                       | 17    |

## RIGHT MAIN WING ASSEMBLY

|                                                               |       |
|---------------------------------------------------------------|-------|
| RIGHT MAIN WING FRAME .....                                   | 20    |
| RIGHT FLIP-OVER WING .....                                    | 21    |
| RIGHT TOOL TENSIONER EXTENSION .....                          | 22    |
| WING TOOL CATCHER .....                                       | 23    |
| WING CYLINDER .....                                           | 24    |
| FLIP-OVER WING CYLINDER .....                                 | 25    |
| WING CASTER WHEEL ASSEMBLY ( -2006) .....                     | 26-27 |
| HEAVY DUTY WING CASTER WHEEL ASSEMBLY (2007 to Present) ..... | 28-29 |

## LEFT MAIN WING ASSEMBLY

|                                   |    |
|-----------------------------------|----|
| LEFT MAIN WING FRAME .....        | 32 |
| LEFT FLIP-OVER WING .....         | 33 |
| LEFT TOOL TENSION EXTENSION ..... | 34 |

## LEFT & RIGHT TOOLING ASSEMBLY

|                                          |       |
|------------------------------------------|-------|
| LEFT & RIGHT SIDE TOOLING ASSEMBLY ..... | 36-37 |
| TOOLING HOUSING ASSEMBLY .....           | 38    |

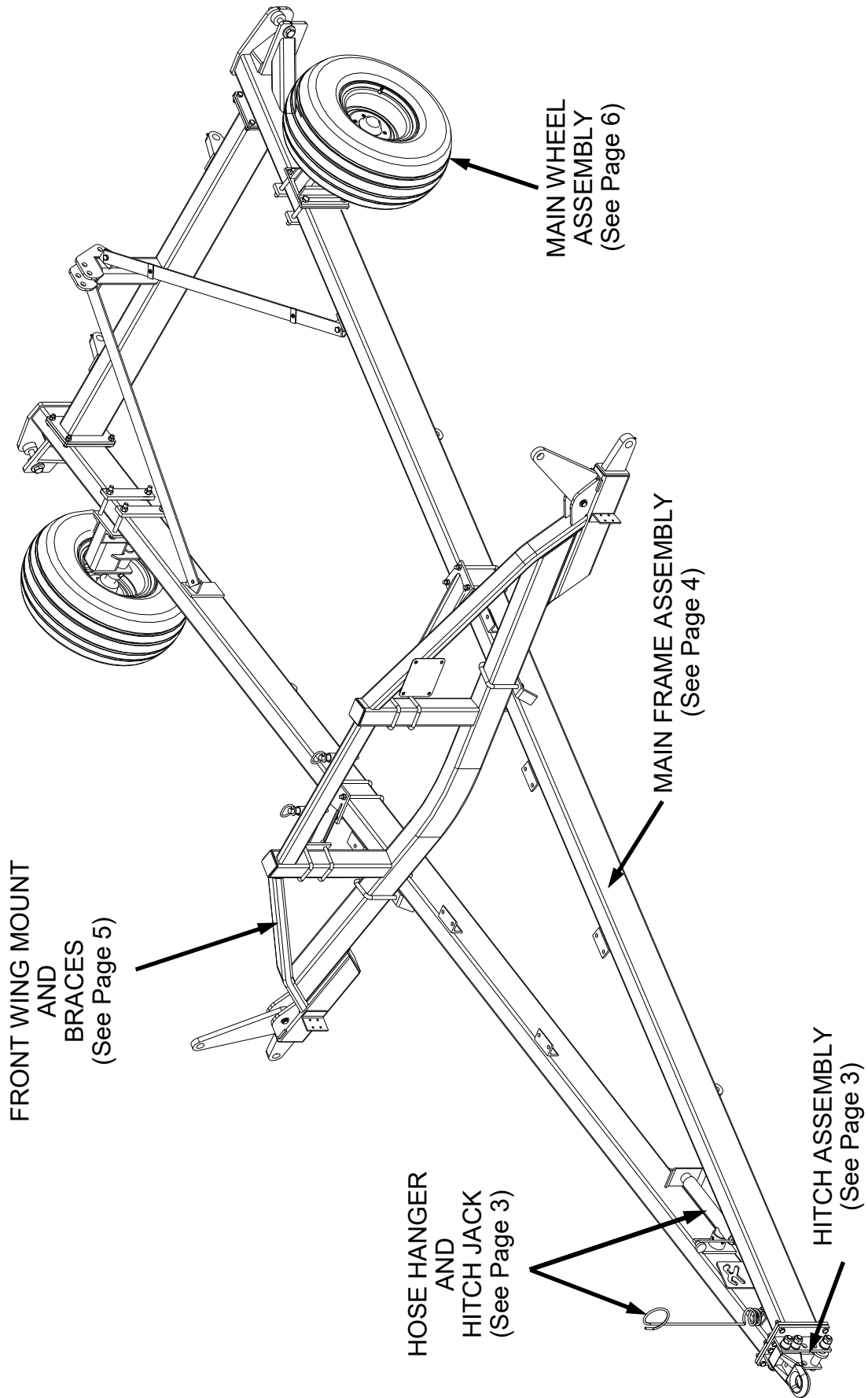
## HYDRAULIC COMPONENTS

|                                               |       |
|-----------------------------------------------|-------|
| HYDRAULIC SCHEMATIC .....                     | 40-41 |
| TAIL HYDRAULIC CYLINDER (3 1/2" X 12") .....  | 42    |
| WING HYDRAULIC CYLINDER (4" X 30") .....      | 43    |
| FLIP-OVER HYDRAULIC CYLINDER (3" X 12") ..... | 44    |

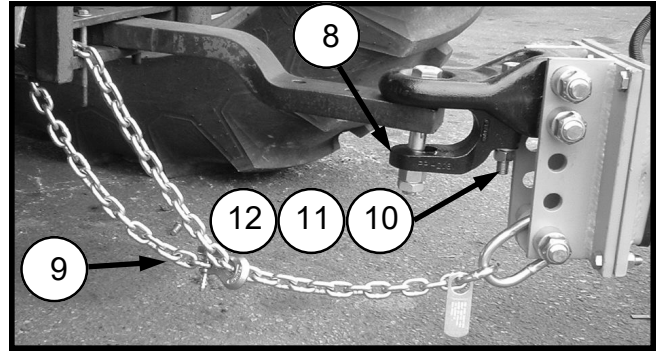
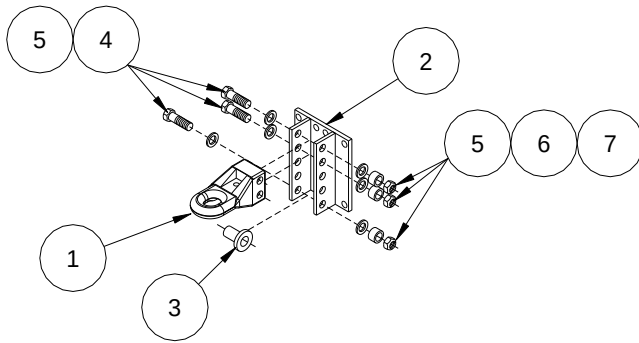
## MISCELLANEOUSE COMPONENTS

|                            |       |
|----------------------------|-------|
| DECAL SCHEMATIC .....      | 46-47 |
| HOSE CLAMP SCHEMATIC ..... | 48-49 |
| LIGHTING SCHEMATIC .....   | 50-51 |

## MAIN FRAME ASSEMBLY

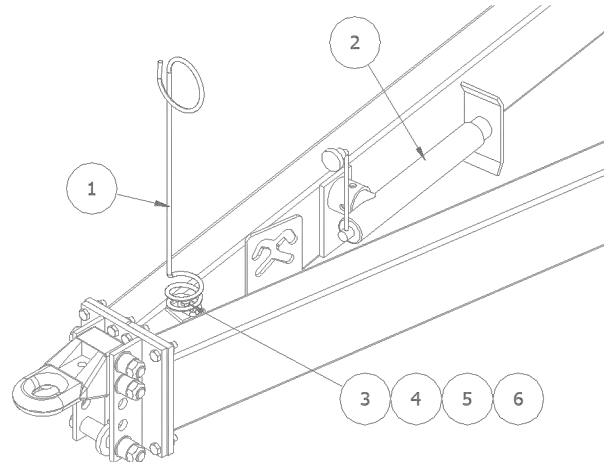




**HITCH ASSEMBLY**

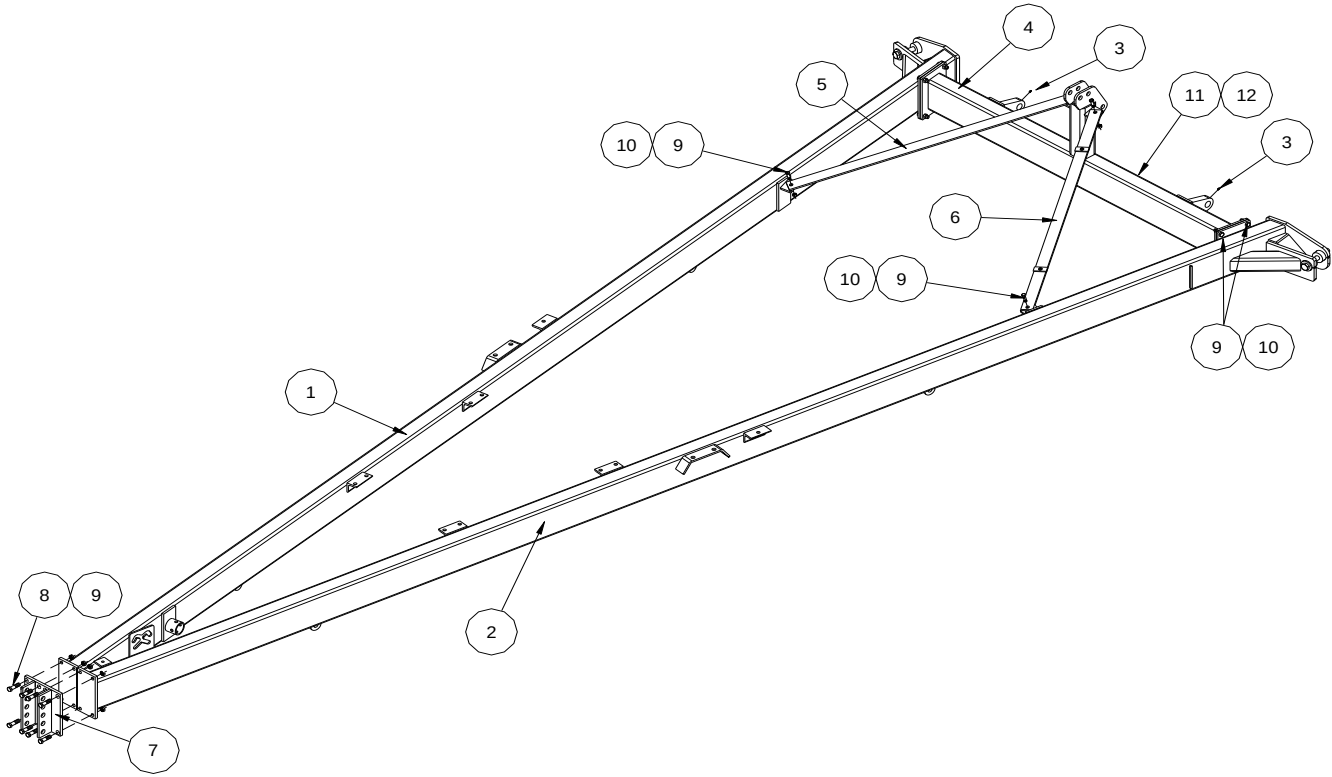
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                | QTY |
|------|-------------|-------------|----------------------------|-----|
| 1    | 31-10951-03 | 61-057-003  | IMPLEMENT HITCH CASTING    | 1   |
| 2    | 05-51062-01 | 61-080-020  | HITCH ATTACH PLATE 2000    | 1   |
| 3    | 05-51063-01 | 61-080-063  | SAFETY CHAIN BAR           | 1   |
| 4    | 31-50199-09 | 48-200600   | 1" X 7 1/2" G8 HEX HD BOLT | 3   |
| 5    | 31-50399-03 | 62-020050   | 1" SAE FLATWASHER, PLT     | 6   |
| 6    | 05-51013-01 | 61-024-041  | LEVER GUIDE, PLT           | 3   |
| 7    | 31-50299-05 | 72-030100   | 1" UNITORQUE NUT G8 PLT    | 3   |
| *8   | 31-10951-02 | 53-050-014  | HITCH, CLEVIS CAST         | 1   |
| 9    | 31-10959-01 | 61-020-034  | AG SAFETY TOW CHAIN        | 1   |
| *10  | 31-50175-14 | 48-200057   | HITCH, BOLT                | 1   |
| *11  | 31-50275-02 | 68-010380   | HITCH, NUT                 | 1   |
| *12  | 31-50375-02 | 66-010350   | LOCKWASHER, 3/4 PLT        | 1   |

\*These parts make up 61-082-003  
(Two Clevis Conversion).

**HOSE HANGER  
AND  
HITCH JACK**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | 31-10307-01 | 61-050-023  | PIG TAIL HOSE HOLDER         | 1   |
| 2    | 31-10950-04 | 61-050-033  | HITCH JACK, 7000 LB W/O TUBE | 1   |
| 3    | 31-50150-03 | 48-090595   | CAPSCREW, 1/2 X 1 1/2 G5 PLT | 1   |
| 4    | 31-50350-02 | 62-010200   | FLATWASHER, 1/2 STD PLT      | 1   |
| 5    | 31-50350-01 | 66-010250   | LOCKWASHER, 1/2 PLT          | 1   |
| 6    | -           | 68-010250   | HEX NUT, 1/2 PLT             | 1   |

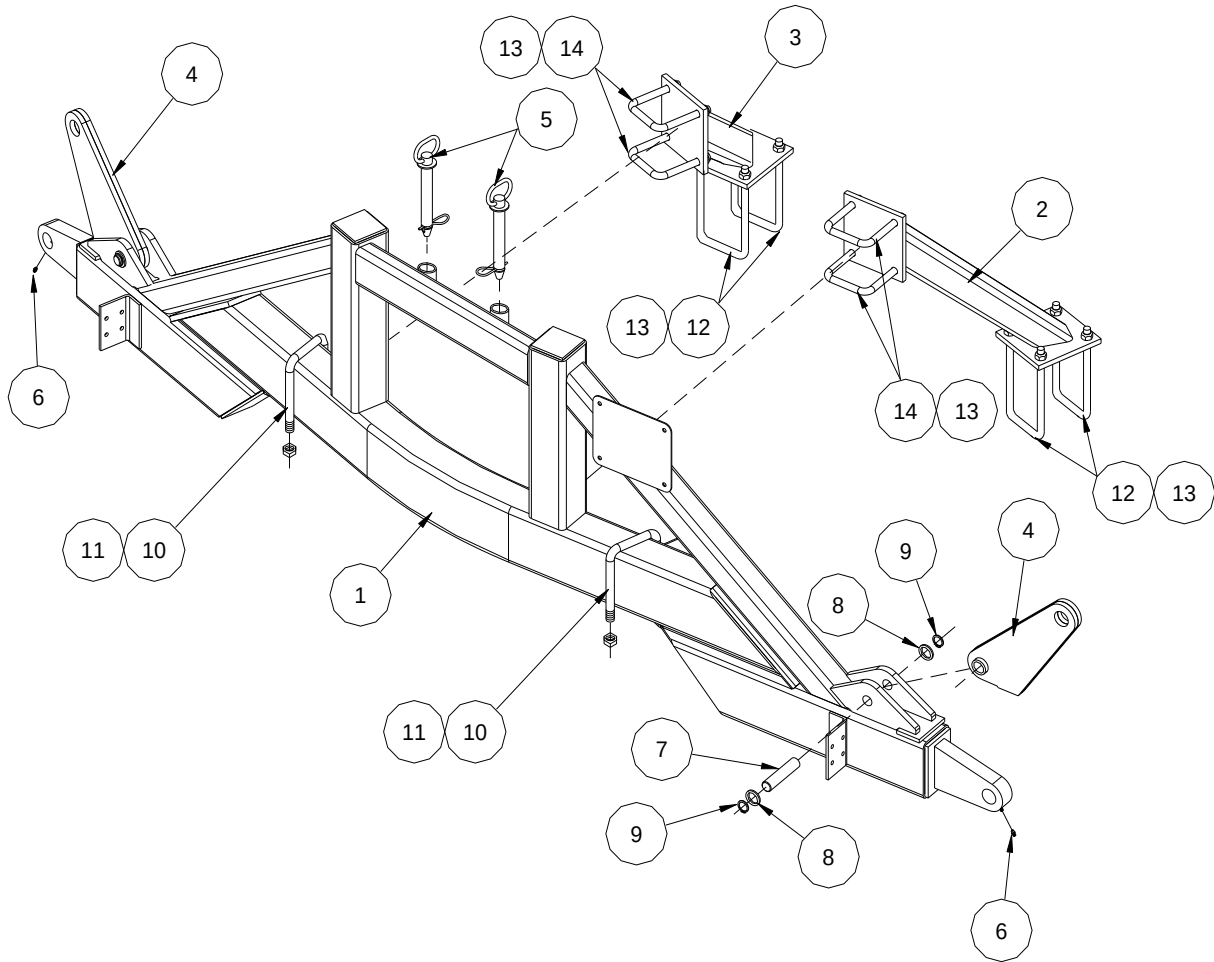
45' ROTARY HARROW  
**MAIN FRAME ASSEMBLY**



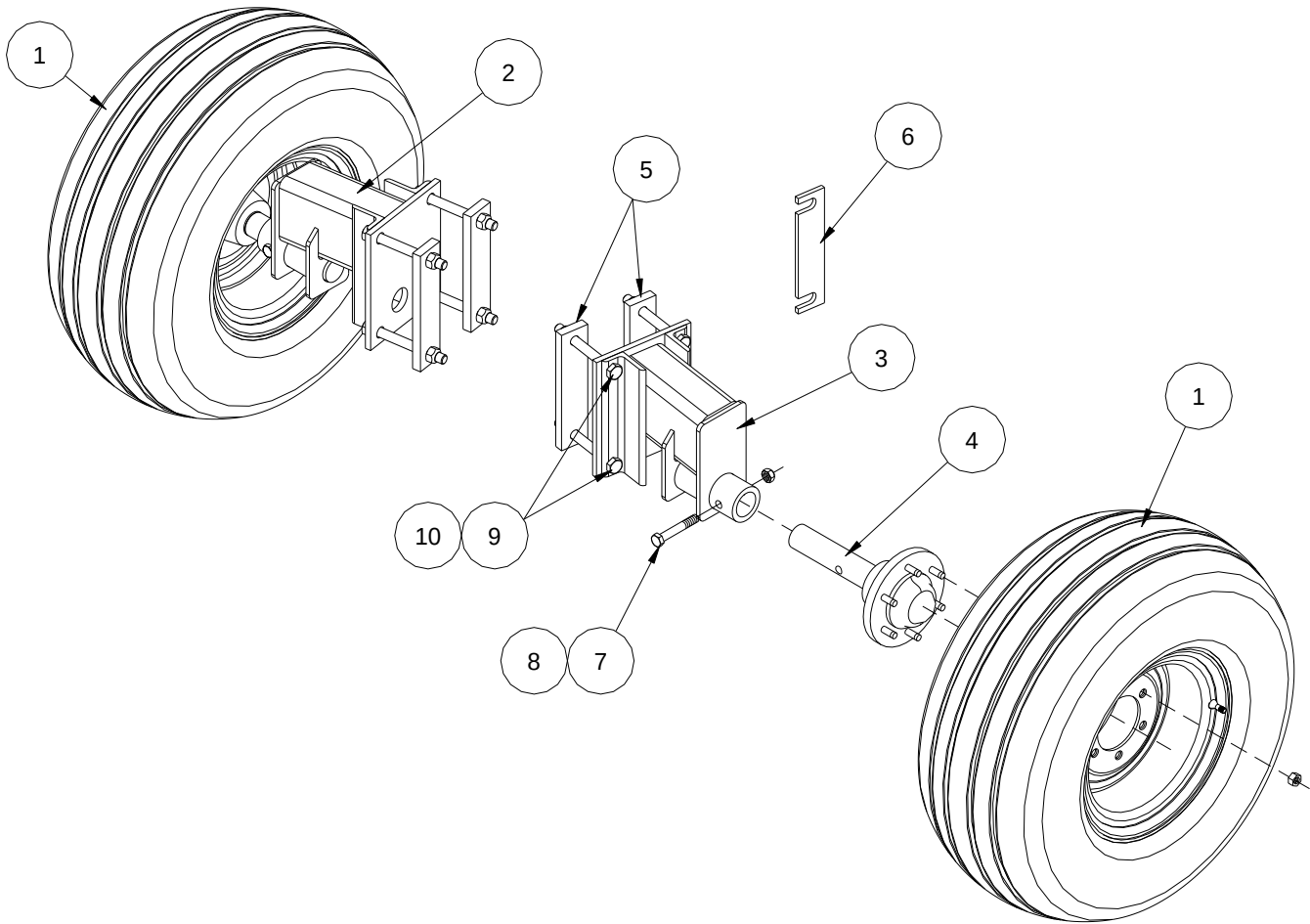
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | 05-51116-00 | 61-080-076  | MAIN BEAM - R.H.             | 1   |
| 2    | 05-51117-00 | 61-080-077  | MAIN BEAM - L.H.             | 1   |
| 3    | 31-50904-02 | 02-050-005  | FITTING, 1/4-28 STRT         | 2   |
| 4    | 05-51099-03 | 61-080-073  | REAR BEAM                    | 1   |
| 5    | 05-51010-03 | 61-080-038  | LH REAR BEAM BRACE           | 1   |
| 6    | 05-51010-04 | 61-080-040  | RH REAR BEAM BRACE           | 1   |
| 7    | 05-51062-01 | 61-080-020  | HITCH ATTACH PLATE 2000      | 1   |
| 8    | 31-50163-13 | 48-200033   | 5/8 X 2 1/4 UNC BOLT         | 8   |
| 9    | 31-50263-05 | 72-020050   | LOCKNUT, 5/8 STOVER G"C" PLT | 28  |
| 10   | 31-50163-12 | 48-200029   | 5/8 X 2 UNC BOLT             | 20  |
| 11   | 05-51038-01 | 61-080-049  | 1 1/2 WRENCH                 | 1   |
| 12   | 31-10601-01 | 05-050-009  | PIN, HAIR COTTER             | 1   |

# 45' ROTARY HARROW

## FRONT WING MOUNT AND BRACES



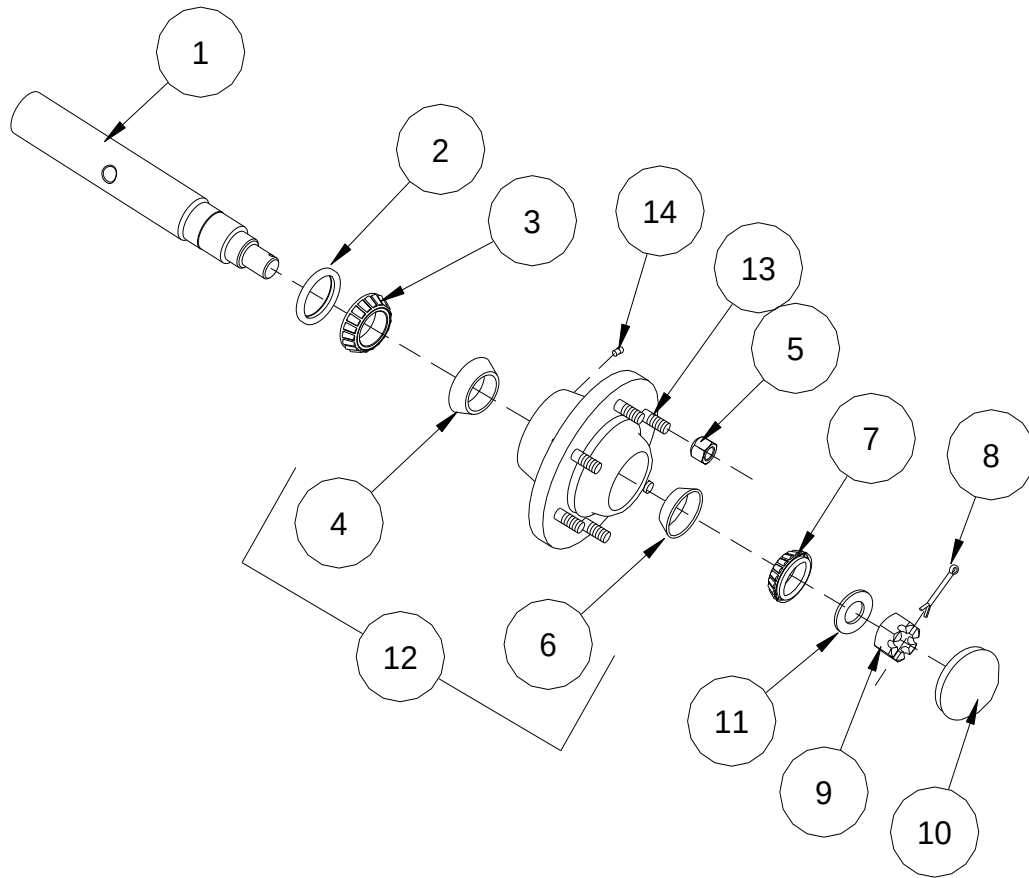
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                              | QTY |
|------|-------------|-------------|------------------------------------------|-----|
| 1    | 05-51118-00 | 61-080-078  | FRONT WING MOUNT                         | 1   |
| 2    | 05-51068-04 | 61-080-066  | RH BRACE, FRONT WING MOUNT               | 1   |
| 3    | 05-51068-03 | 61-080-065  | LH BRACE, FRONT WING MOUNT               | 1   |
| 4    | 05-51022-02 | 61-080-041  | LOCK LEVER                               | 2   |
| 5    | 31-10608-01 | 61-050-024  | 7/8 X 6 1/2 USEABLE HITCH PIN            | 2   |
| 6    | 31-50904-02 | 02-050-005  | GREASE NIPPLE, 1/4 UNF                   | 2   |
| 7    | 05-51055-01 | 61-026-021  | GROOVED PIN, 1 X 3 1/2 PLT               | 2   |
| 8    | 31-50908-09 | 61-050-038  | SHEET MACH. BUSH 1 1/2 OD X 1 ID X 10 GA | 4   |
| 9    | 31-50907-03 | 61-050-037  | 1" HVY EXT. SNAP RING .078 THK           | 4   |
| 10   | 31-10946-17 | 61-050-027  | U-BOLT, 3/4-10 X 7.25 X 18.4140EPL       | 2   |
| 11   | 31-50275-07 | 72-020128   | LOCKNUT, 3/4 STOVER GD C PLT             | 4   |
| 12   | 31-10946-22 | 61-050-030  | U-BOLT, 5/8 X 4 11/16W X 9 1/2L          | 4   |
| 13   | 31-50263-05 | 72-020050   | LOCKNUT, 5/8 STOVER GD C PLT             | 16  |
| 14   | 31-10946-05 | 20-050-057  | U-BOLT, 5/8 UNC X 4.68W X 5.25L          | 4   |

**MAIN WHEEL ASSEMBLY**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                       | QTY |
|------|-------------|-------------|-----------------------------------|-----|
| 1    | -           | 61-081-011  | TIRE & WHEEL, 12.5L-15 (LOAD F)   | 2   |
| 2    | 05-51080-03 | 61-080-069  | MAIN WHEEL MOUNT, R.H.            | 1   |
| 3    | 05-51080-04 | 61-080-070  | MAIN WHEEL MOUNT, L.H.            | 1   |
| 4    | 30-90544-01 | 61-058-007  | HUB AND SPINDLE ASSEMBLY          | 2   |
| 5    | 05-51071-01 | 61-023-061  | MAIN WHEEL, BACK PLATE, 3/4 BOLTS | 4   |
| 6    | 30-90376-17 | 61-027-091  | SHIM WHEEL MOUNT                  | A/R |
| 7    | -           | 48-200032   | CAPSCREW, 5/8 X 4 G8 PLT          | 2   |
| 8    | -           | 72-020050   | LOCKNUT, 5/8 STOVER GD C PLT      | 2   |
| 9    | 31-50175-11 | 48-200063   | 3/4 X 7 UNC BOLT                  | 8   |
| 10   | 31-50275-07 | 72-020128   | LOCKNUT, 3/4 STOVER GD C PLT      | 8   |



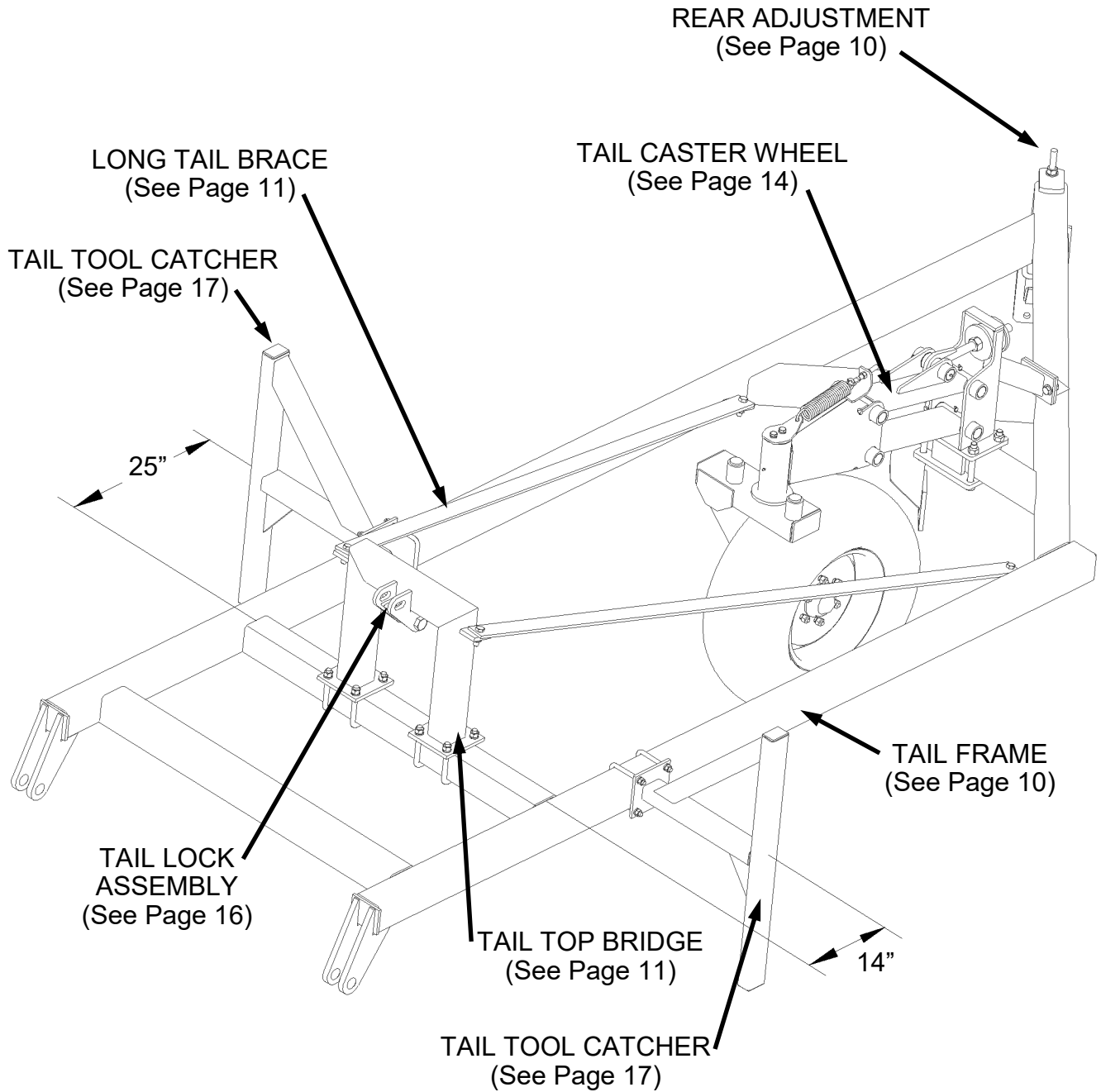
# **MAIN FRAME WHEEL HUB AND SPINDLE** (30-90544-01)



| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                      | QTY |
|------|-------------|-------------|----------------------------------|-----|
| 1    | 30-90540-12 | -           | SPINDLE, S614-A111               | 1   |
| 2    | 31-50909-06 | -           | SE-16 GREASE SEAL                | 1   |
| 3    | 31-10210-07 | -           | BRG, CONE LM 603049              | 1   |
| 4    | 31-10210-05 | -           | BRG, CUP LM 603011               | 1   |
| 5    | 31-10901-04 | -           | WB-40 WHEEL NUT 9/16 - 18 UNF    | 6   |
| 6    | 31-10210-06 | -           | BRG CUP, LM 48510                | 1   |
| 7    | 31-10210-08 | -           | BRG CONE, LM 48548               | 1   |
| 8    | 31-50912-01 | -           | 3/16 X 2 COTTER PIN, PLT         | 1   |
| 9    | 31-10909-03 | -           | WB-33 SPINDLE NUT, 1-14 UNS      | 1   |
| 10   | 31-10902-04 | -           | H614 DUST CAP (DC-15)            | 1   |
| 11   | 31-10909-01 | -           | WA-17 SPINDLE WASHER             | 1   |
| 12   | 31-10900-14 | -           | HUB, C/W BRG CUPS 6-BOLTS        | 1   |
| 13   | 31-10900-15 | -           | BOLT, 9/16 UNF X 2.25 WHEEL STUD | 6   |
| 14   | 31-50904-12 | -           | GREASE NIPPLE, 1/4 UNF           | 1   |

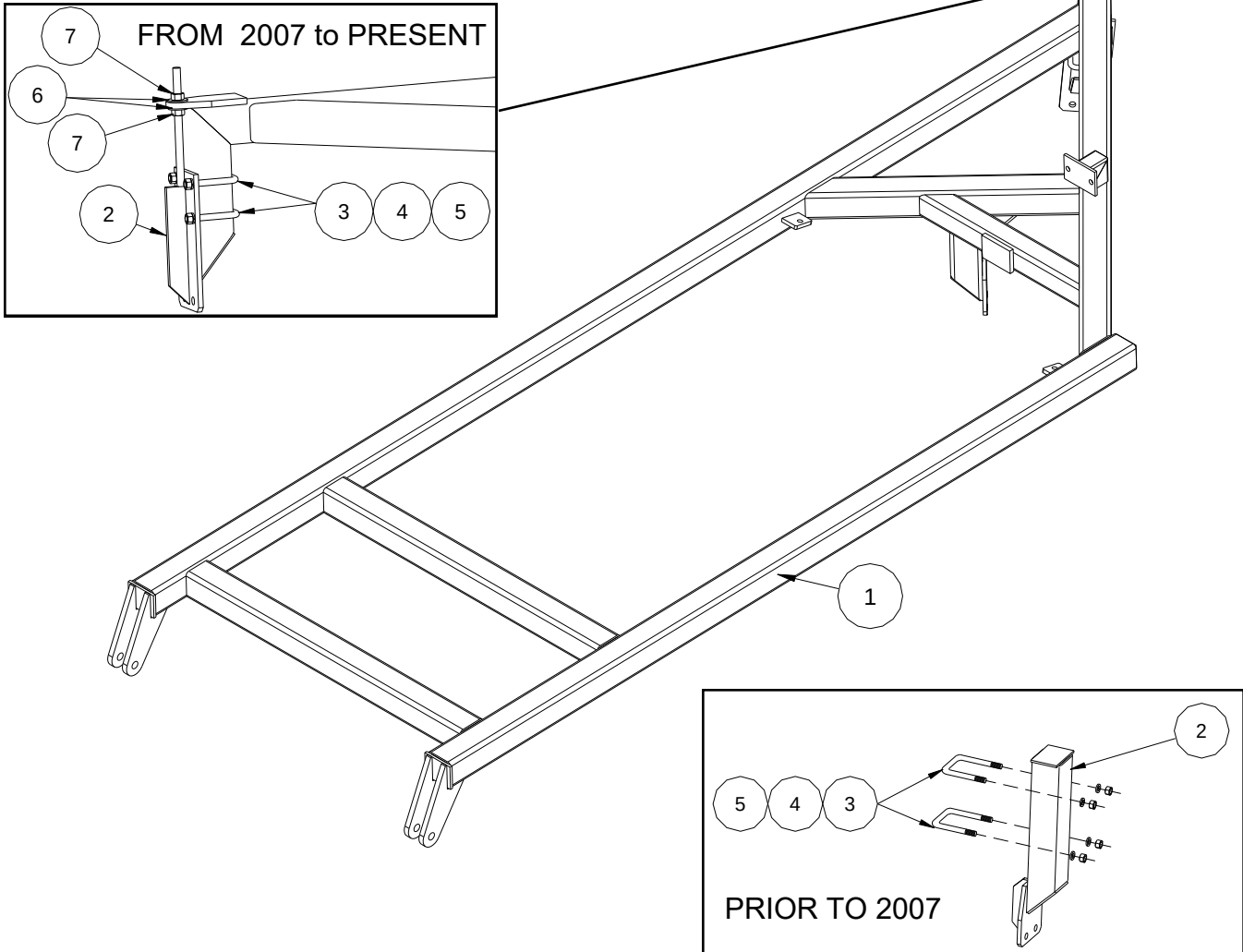
BLANK  
PAGE

## TAIL FRAME ASSEMBLY



# 45' ROTARY HARROW

## TAIL FRAME



### PRIOR TO 2007

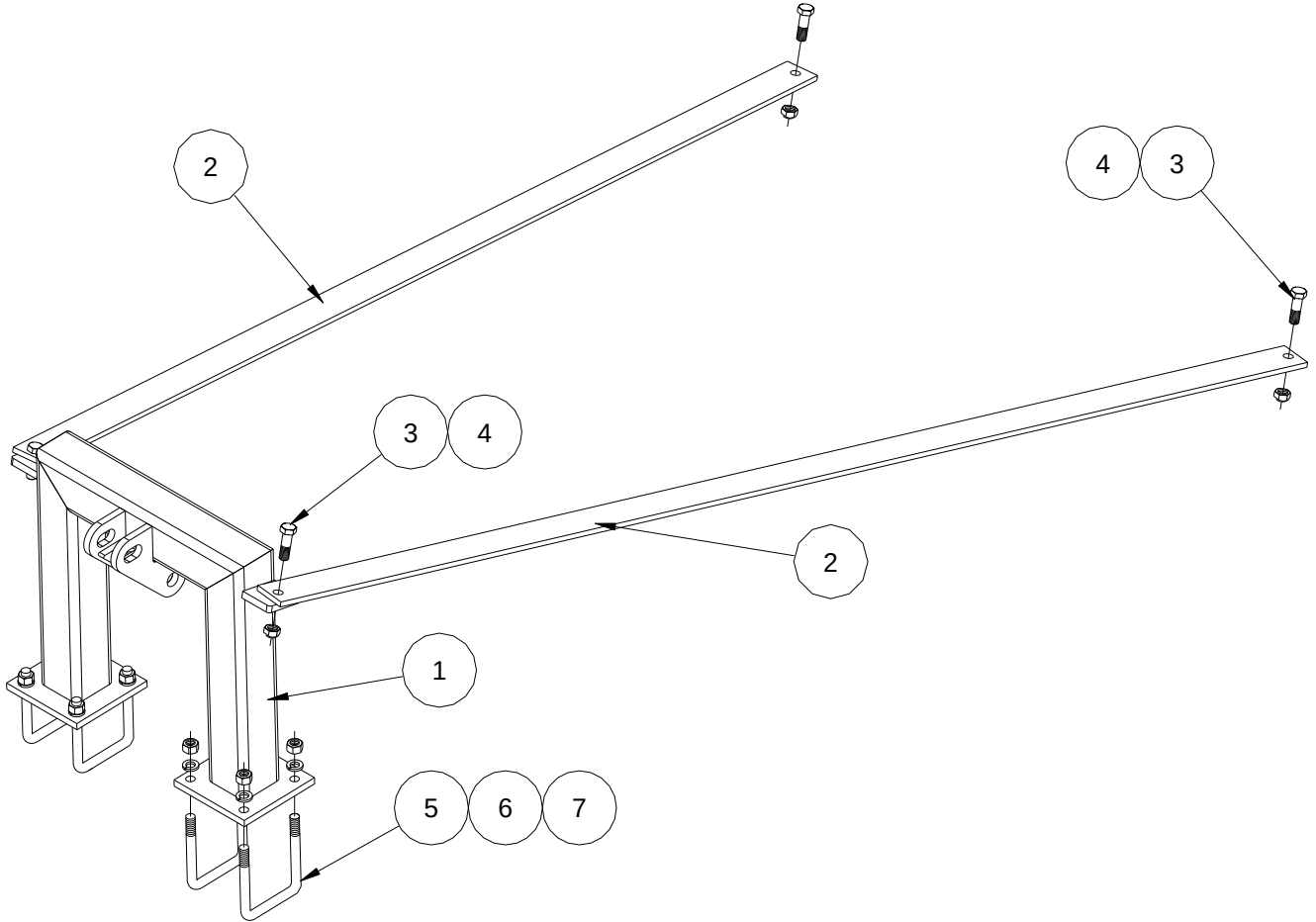
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                     | QTY |
|------|-------------|-------------|---------------------------------|-----|
| 1    | 05-51006-02 | 61-080-036  | TAIL SECTION                    | 1   |
| 2    | 05-51037-05 | -           | RR TOOL ADJUST ASSY             | 1   |
| 3    | 31-10946-05 | 20-050-037  | U-BOLT, 5/8 UNC X 4.68W X 5.25L | 2   |
| 4    | 31-50363-01 | 66-010300   | LOCKWASHER, 5/8 PLT             | 4   |
| 5    | 31-50263-01 | 68-010300   | HEX NUT, 5/8 PLT                | 4   |

### FROM 2007 to PRESENT

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                   | QTY |
|------|-------------|-------------|-------------------------------|-----|
| 1    | 05-51006-02 | 61-080-036  | TAIL WELDMENT, 45FT           | 1   |
| 2    | 05-51008-01 | 61-080-037  | REAR ADJUSTMENT               | 1   |
| 3    | 31-50375-03 | 62-020045   | FLATWASHER, 3/4 SAE PLT       | 2   |
| 4    | 31-50275-02 | 68-010380   | 3/4 UNC HEX NUT, G8 PLT       | 2   |
| 5    | 31-10946-05 | 20-050-057  | U-BOLT, 5/8 X 5 1/2 X 4 11/16 | 2   |
| 6    | 31-50363-01 | 66-010300   | LOCKWASHER, 5/8 PLT           | 4   |
| 7    | 31-50263-01 | 68-010300   | HEX NUT, 5/8 PLT              | 4   |

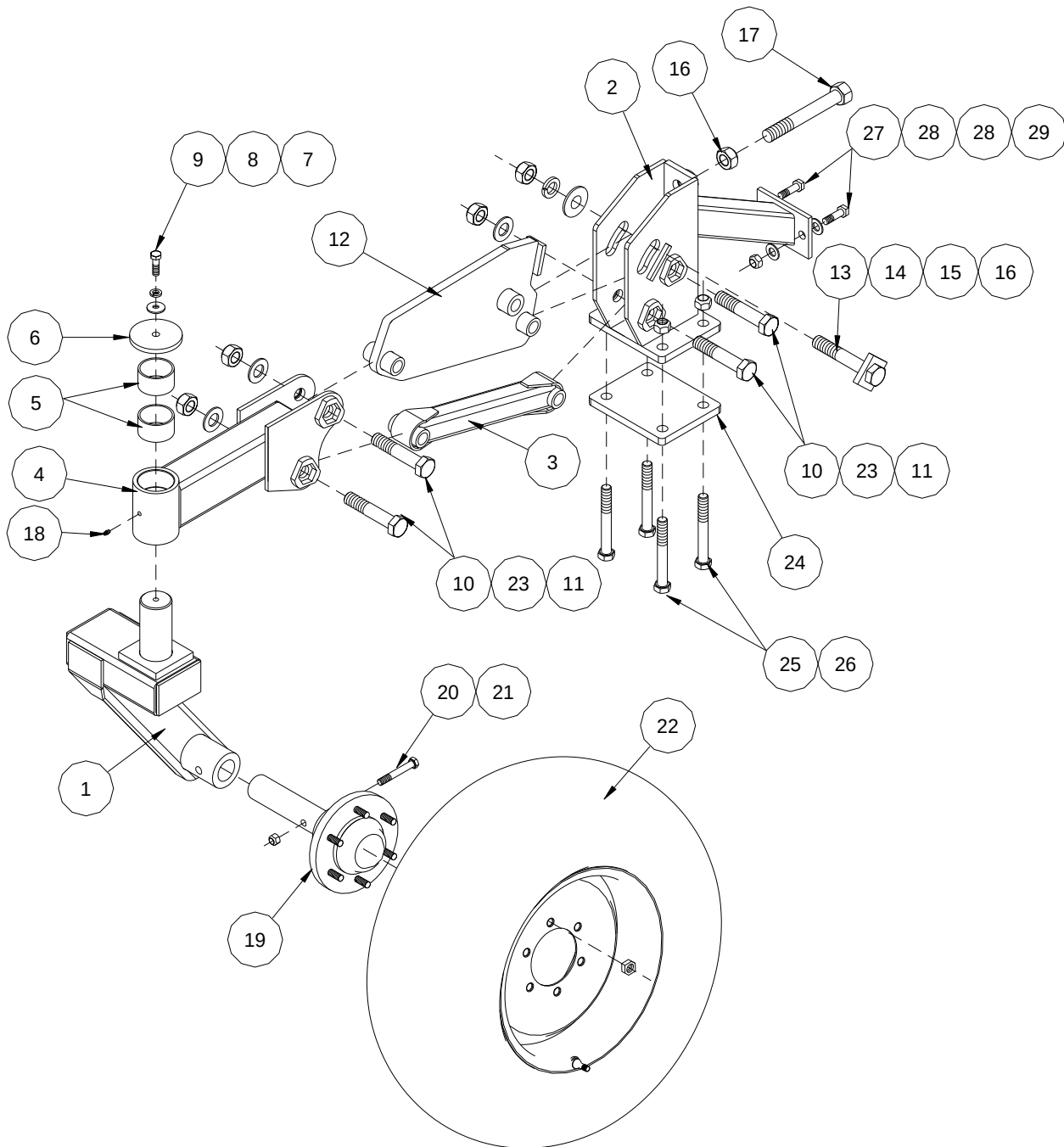
# 45' ROTARY HARROW

## TAIL TOP BRIDGE



| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                      | QTY |
|------|-------------|-------------|----------------------------------|-----|
| 1    | 05-51039-02 | 61-080-050  | TAIL TOP BRIDGE                  | 1   |
| 2    | 05-51009-02 | 61-023-039  | TAIL BRACE                       | 2   |
| 3    | 31-50163-12 | 48-200029   | 5/8 X 2 UNC BOLT                 | 4   |
| 4    | 31-50263-05 | 72-020050   | 5/8 UNC UNITORQUE NUT G8 PLT     | 4   |
| 5    | 31-10946-05 | 20-050-057  | U-BOLT , 5/8 UNC X 4.68W X 5.25L | 4   |
| 6    | 31-50363-01 | 66-010300   | LOCKWASHER, 5/8 PLT              | 8   |
| 7    | 31-50263-01 | 68-010300   | HEX NUT, 5/8 PLT                 | 8   |

# **TAIL CASTER WHEEL ASSEMBLY** (PRIOR TO 2007)



| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION            | QTY |
|------|-------------|-------------|------------------------|-----|
| 1    | 05-51079-01 | -           | SWIVEL, CASTER WHEEL   | 1   |
| 2    | 05-51059-01 | -           | TAIL CASTER MOUNT BRKT | 1   |
| 3    | 05-51095-01 | 61-080-025  | ARM, LOWER CASTER      | 1   |
| 4    | 05-51057-01 | -           | CASTER BUSHING ARM     | 1   |
| 5    | 05-01873-01 | 61-050-013  | CASTER BUSHING         | 2   |
| 6    | 05-01142-01 | 61-027-035  | SPRING CAP, CASTER     | 1   |



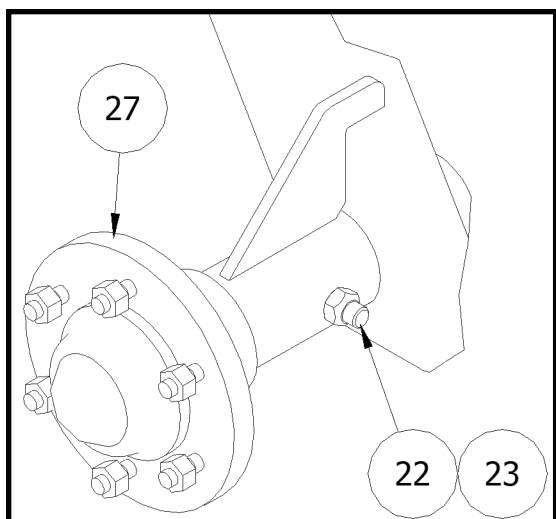
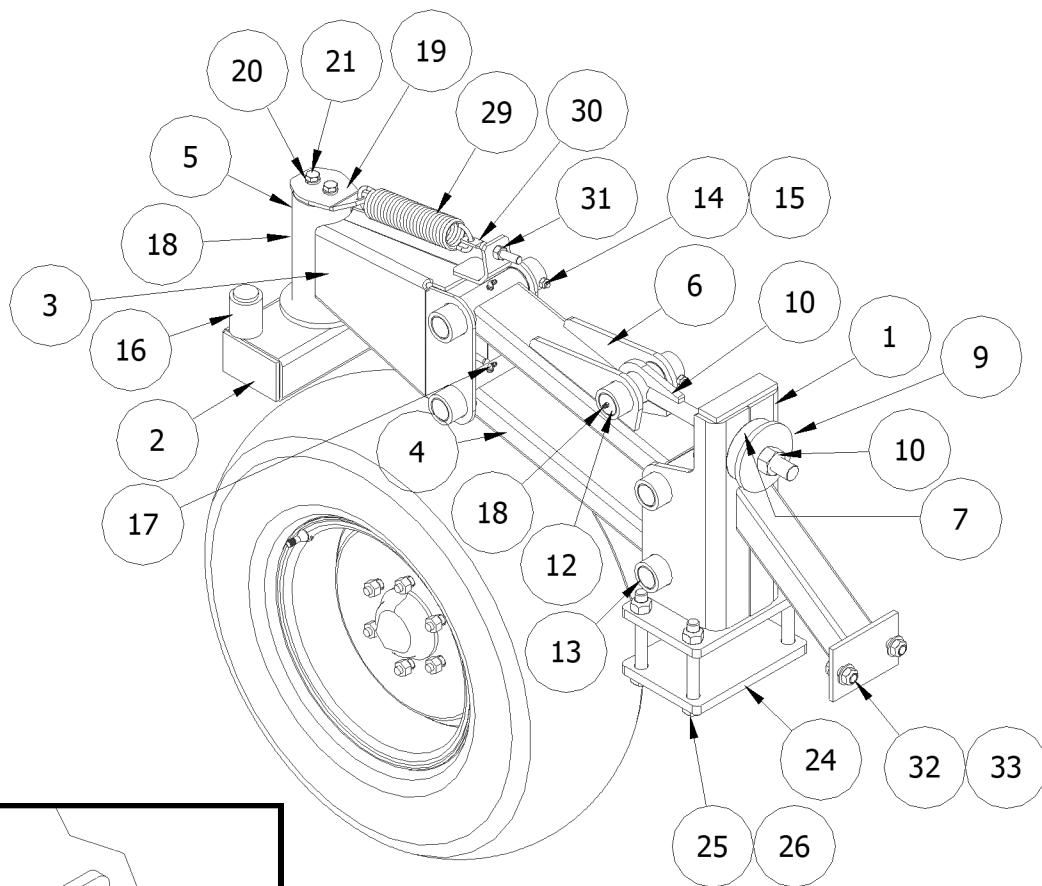
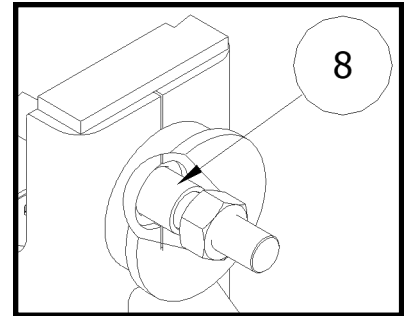
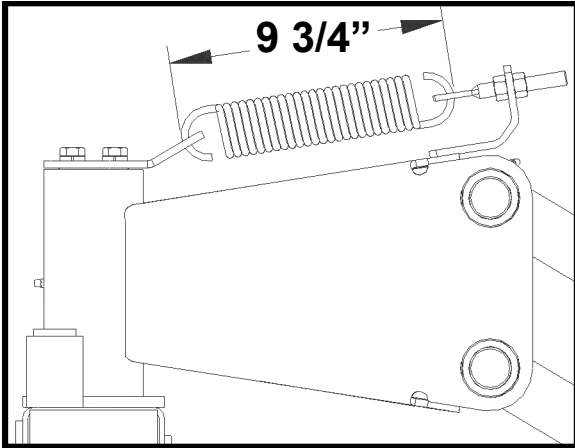
45' ROTARY HARROW

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                     | QTY |
|------|-------------|-------------|---------------------------------|-----|
| 7    | -           | 62-010250   | FLATWASHER, 5/8 STD PLT         | 1   |
| 8    | -           | 66-010250   | LOCKWASHER, 1/2 REG PLT         | 1   |
| 9    | -           | 48-090595   | CAPSCREW, 1/2 X 1 1/2 NC G5 PLT | 1   |
| 10   | -           | 48-200350   | CAPSCREW, 1 X 5 G8 PLT          | 4   |
| 11   | 31-50299-05 | 72-030100   | LOCKNUT, 1" NC STOVER G"C" PLT  | 4   |
| 12   | 05-51100-01 | -           | CASTER, UPPER ARM               | 1   |
| 13   | 05-51044-01 | 61-080-028  | LOCK BOLT, CASTER WHEEL         | 1   |
| 14   | 31-50399-01 | 62-010370   | FLATWASHER, 1" STD PLT          | 1   |
| 15   | 31-50399-02 | 66-010450   | LOCKWASHER, 1" PLT              | 1   |
| 16   | 31-50299-02 | 68-010460   | HEX NUT, 1" PLT                 | 2   |
| 17   | 05-51061-01 | 61-080-029  | HEIGHT ADJ BOLT, 2000 CASTER    | 1   |
| 18   | 31-50904-02 | 02-050-005  | FITTING, 1/4-28 STRT. GREASE    | 1   |
| *19  | 30-90544-01 | 61-058-007  | HUB AND SPINDLE ASSY 6-BOLT     | 1   |
| 20   | -           | 48-200032   | CAPSCREW, 5/8 X 4 UNC G8 PLT    | 1   |
| 21   | -           | 72-020050   | LOCKNUT, 5/8 NC STOVER G"C" PLT | 3   |
| 22   | 05-51081-01 | 61-081-036  | SMOOTH TIRE & RIM               | 1   |
| 23   | 31-50399-03 | 62-020050   | FLATWASHER, 1 SAE PLT           | 4   |
| 24   | 30-90376-09 | 61-023-023  | BOTTOM PLATE, CASTER BRACKET    | 1   |
| 25   | 31-50175-09 | 48-200058   | CAPSCREW, 3/4 X 6 NC G8 PLT     | 4   |
| 26   | -           | 72-020128   | LOCKNUT, 3/4 STOVER G"C" PLT    | 4   |
| 27   | 31-50163-14 | 48-200042   | 5/8 X 1 1/2 CAPSCREW            | 2   |
| 28   | 31-50363-02 | 62-020040   | 5/8 SAE FLATWASHER, PLT         | 4   |

\* For breakdown on hub and spindle see page 7.

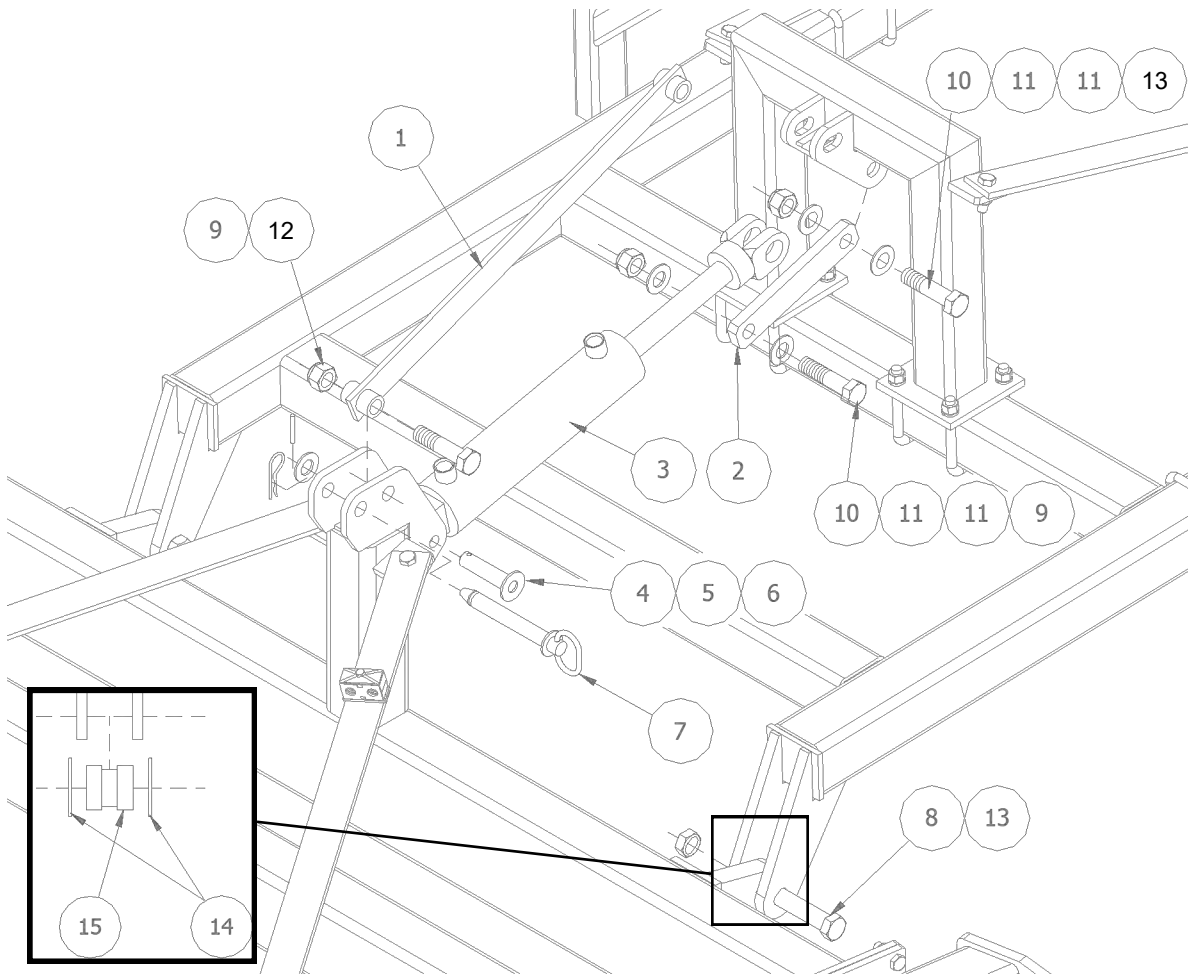
| COLD INFLATION PRESSURES FOR 30' HARROWS |             |                            |                                    |                                    |
|------------------------------------------|-------------|----------------------------|------------------------------------|------------------------------------|
| TIRE SIZE                                | TRANSPORT   | FIELD USE                  | FIELD USE WITH GRANULAR APPLICATOR | TRANSPORT WITH GRANULAR APPLICATOR |
| 12.5L X 15 (F-PLY)<br>(Main Wheels)      | 40 PSI MIN. | 25 PSI MIN.                | 30 PSI MIN.                        | 55 PSI MIN.                        |
| 7.5 x 14<br>(Caster Wheels)              | N/A         | 20 PSI MIN.<br>22 PSI MIN. | 20 PSI MIN.<br>22 PSI MIN.         | N/A                                |

**HEAVY DUTY TAIL CASTER WHEEL ASSEMBLY (61-081-010)**  
(2007 TO PRESENT)



## 45' ROTARY HARROW

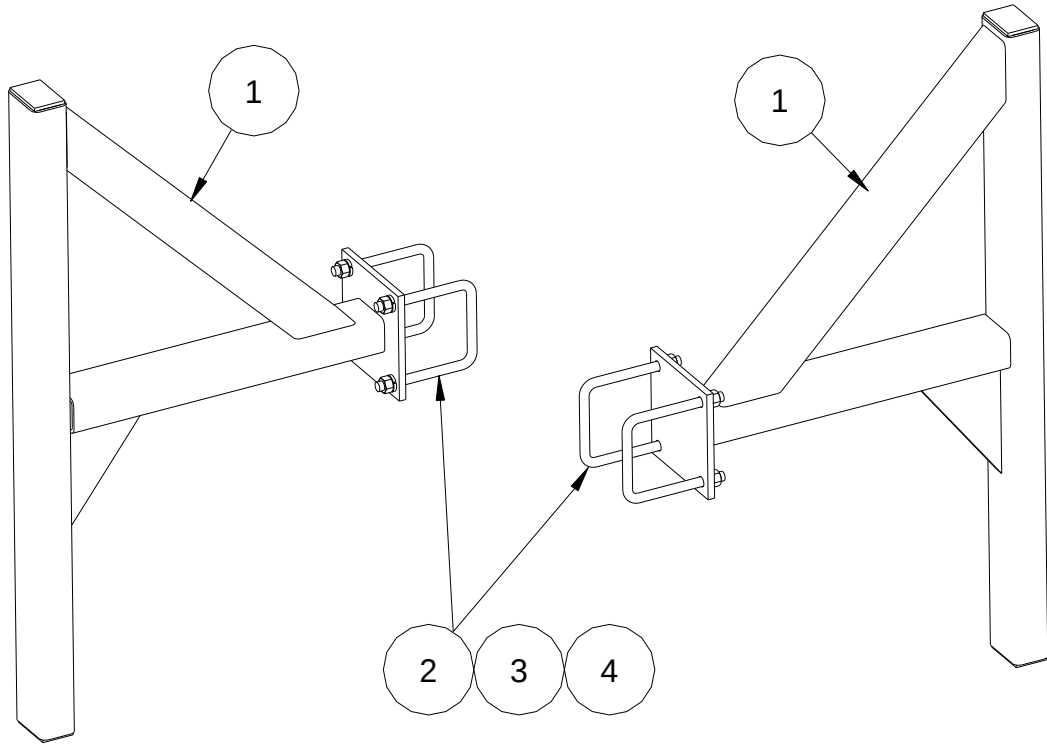
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                    | QTY |
|------|-------------|-------------|--------------------------------|-----|
| 1    | -           | 61-080-013  | CASTER MOUNT BRACKET TAIL      | 1   |
| 2    | -           | 61-080-009  | CASTER SWIVEL, H.D.            | 1   |
| 3    | -           | 61-080-007  | CASTER BUSHING ARM, H.D.       | 1   |
| 4    | -           | 61-080-010  | CASTER, LOWER LINK H.D.        | 1   |
| 5    | -           | 61-050-003  | CASTER BUSHING, H.D.           | 2   |
| 6    | -           | 61-080-011  | CASTER, UPPER LINK, H.D.       | 1   |
| 7    | -           | 61-026-012  | CASTER, CUSHION BLOCK, H.D.    | 2   |
| 8    | -           | 61-024-016  | SPACER, CUSHION BLOCK, H.D.    | 1   |
| 9    | -           | 61-027-020  | WASHER, CUSHION BLOCK, H.D.    | 2   |
| 10   | -           | 61-080-012  | HEIGHT ADJUSTMENT, H.D.        | 1   |
| 11   | -           | 68-010460   | HEX NUT, 1" G8 PLT             | 2   |
| 12   | -           | 61-026-011  | SHORT PIVOT PIN, H.D.          | 1   |
| 13   | -           | 61-026-010  | LONG PIVOT PIN, H.D.           | 4   |
| 14   | -           | 48-090220   | CAPSCREW, 3/8 X 2 1/2 G5 PLT   | 5   |
| 15   | -           | 72-010050   | LOCKNUT, 3/8 STOVER GB PLT     | 5   |
| 16   | -           | 61-059-001  | CASTER BUMPER, H.D.            | 2   |
| 17   | -           | 02-050-017  | FITTING, 1/4-28 45 DEG.        | 4   |
| 18   | -           | 02-050-005  | FITTING, 1/4-28 STRT GREASE    | 2   |
| 19   | -           | 61-027-021  | CASTER CAP, H.D.               | 1   |
| 20   | -           | 66-010250   | LOCKWASHER, 1/2 REG PLT        | 2   |
| 21   | -           | 48-090592   | CAPSCREW, 1/2 X 1 1/4 G5 PLT   | 2   |
| 22   | -           | 48-091060   | CAPSCREW, 5/8 X 4 G5 PLT       | 1   |
| 23   | -           | 72-020050   | LOCKNUT, 5/8 STOVER GC PLT     | 3   |
| 24   | -           | 61-027-011  | BASE PLATE, H.D. CASTER        | 1   |
| 25   | 31-50175-09 | 48-200058   | CAPSCREW, 3/4 X 6 G8 PLT       | 4   |
| 26   | -           | 72-020128   | LOCKNUT, 3/4 STOVER, GC PLT    | 4   |
| 27   | 30-90544-01 | 61-058-007  | HUB AND SPINDLE 6-BOLT         | 1   |
| 28   | 05-51081-01 | 61-081-036  | SMOOTH TIRE & RIM 15" X 6-BOLT | 1   |
| 29   | -           | 61-050-004  | SPRING, TENSION CASTER         | 1   |
| 30   | -           | 61-050-005  | ANCHOR, SPRING, CASTER         | 1   |
| 31   | -           | 68-010260   | HEX NUT, 1/2 G8 PLT            | 2   |
| 32   | -           | 62-020040   | FLATWASHER, 5/8 SAE PLT        | 4   |
| 33   | -           | 48-200042   | CAPSCREW, 5/8 X 1 1/2 G8 PLT   | 2   |

**TAIL LOCK ASSEMBLY**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | 05-51007-01 | -           | TAIL LOCKING BAR, 2007       | 1   |
|      | -           | 61-080-017  | TAIL LOCKING BAR, 2008       | 1   |
| 2    | 05-51012-01 | 61-023-060  | TAIL LEVER                   | 1   |
| 3    | 31-10520-01 | 61-061-023  | 3.5 X 12 HYD CYLINDER        | 1   |
| 4    | 05-51049-01 | 61-080-060  | PLATED PIN, 1 X 4 1/8        | 1   |
| 5    | 31-50399-03 | 62-020050   | 1 " SAE FLATWASHER, PLT      | 1   |
| 6    | -           | 76-010200   | COTTER PIN, 1/4 X 2          | 1   |
| 7    | 31-10608-01 | 61-050-024  | 7/8 X 6 1/2 USABLE HITCH PIN | 1   |
| 8    | 31-50199-03 | 48-200325   | CAPSCREW, 1 X 4 1/2 G8 PLT   | 2   |
| 9    | 31-50299-03 | 72-010140   | LOCKNUT, 1 NYLON INSERT PLT  | 2   |
| 10   | 31-50199-01 | 48-200300   | CAPSCREW, 1 X 4              | 2   |
| 11   | 31-50399-04 | 61-050-036  | FLATWASHER, 1 UHMW           | 4   |
| 12   | 31-50199-03 | 48-200350   | CAPSCREW, 1 X 5 PLT          | 1   |
| 13   | 31-50299-05 | 72-030100   | LOCKNUT, 1" TOPLOCK G8 PLT   | 3   |
| 14   | 05-01648-01 | 61-050-012  | WASHER, THRUST UHMW          | 4   |
| 15   | 05-51011-01 | 61-026-024  | BUSHING LONG                 | 2   |

45' ROTARY HARROW

**TAIL TOOL CATCHER**

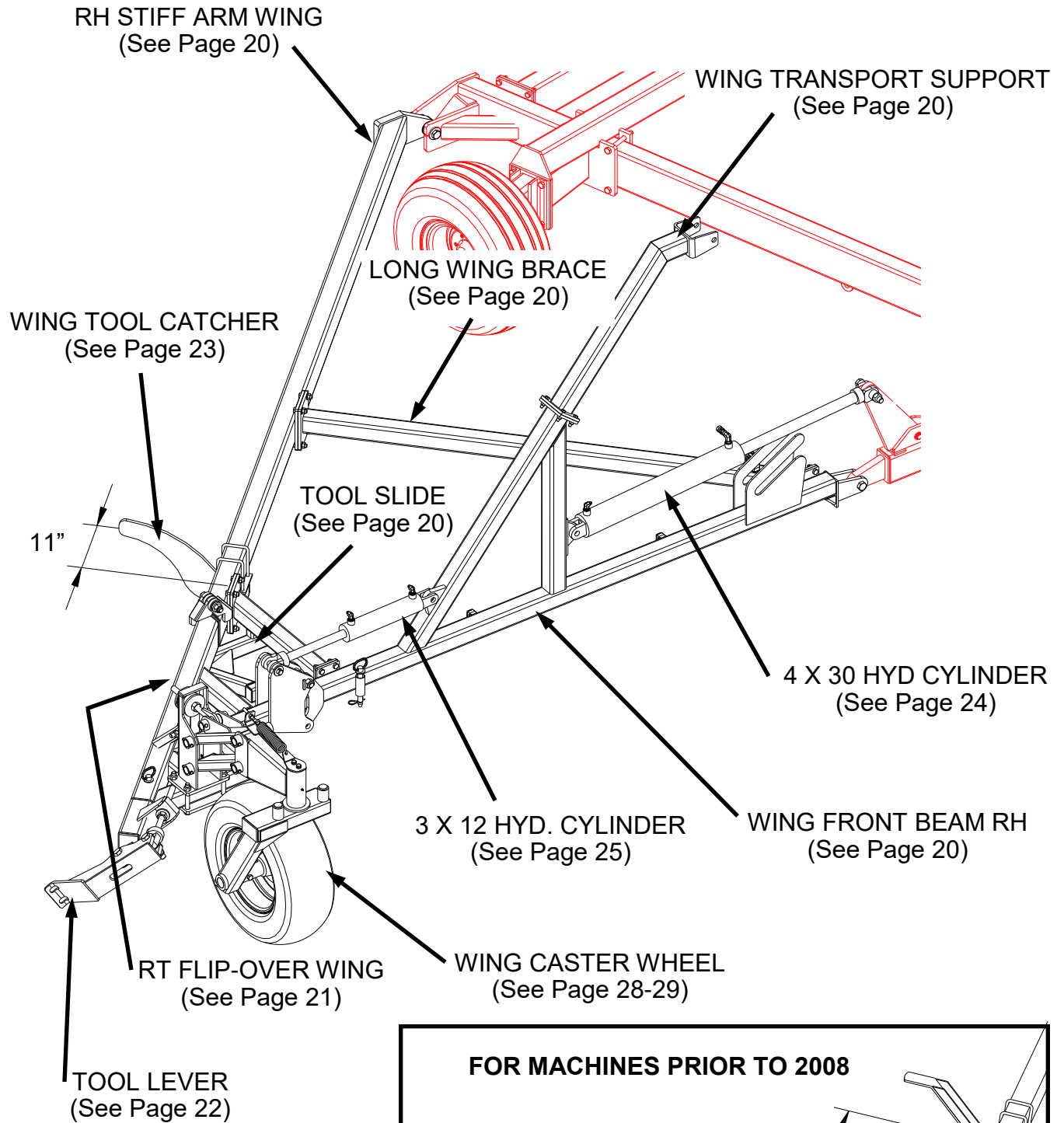


REFER TO PAGE 9 FOR LOCATION ON FRAME

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                    | QTY |
|------|-------------|-------------|--------------------------------|-----|
| 1    | 05-51077-01 | 61-080-068  | TAIL TOOL CATCHER              | 2   |
| 2    | 31-10946-18 | 61-050-028  | U-BOLT, 1/2 X 4 9/16W X 5 1/4L | 4   |
| 3    | 31-50350-01 | 66-010250   | 1/2 LOCKWASHER, PLT            | 8   |
| 4    | 31-50250-01 | 68-010250   | 1/2 UNC HEX NUT PLT            | 8   |

BLANK  
PAGE

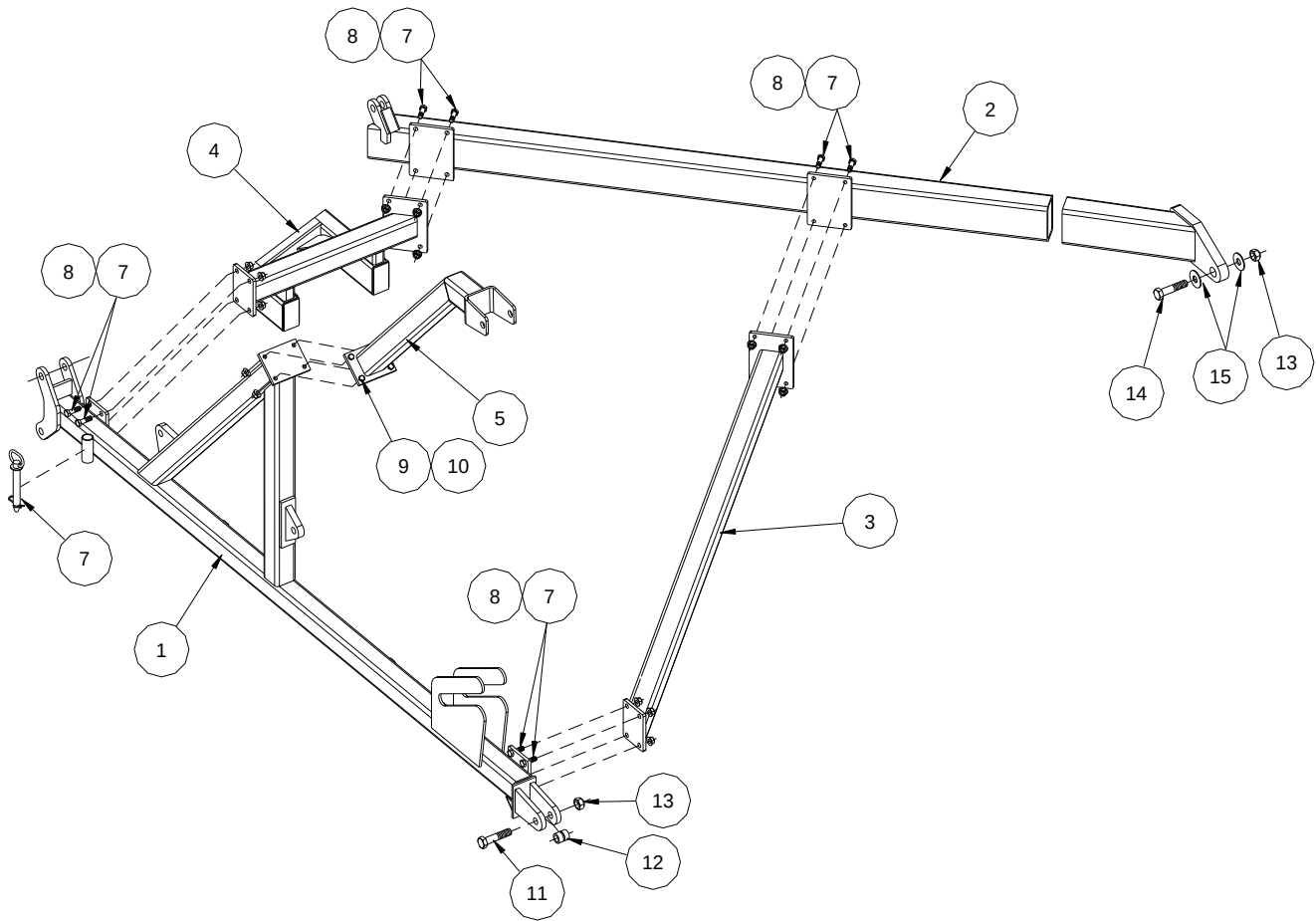
## RIGHT WING ASSEMBLY



### FOR MACHINES PRIOR TO 2008

WING TOOL CATCHER  
(See Page 23)

20"  
50"

**RIGHT WING MAIN FRAME**

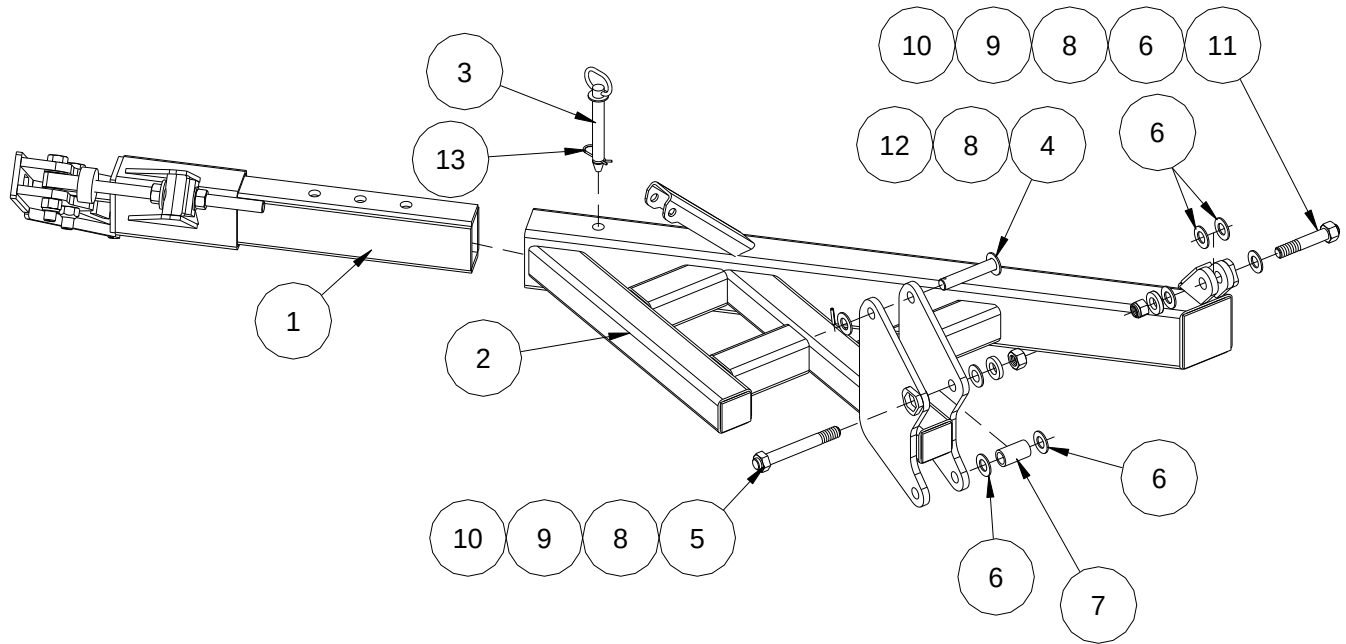
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                      | QTY |
|------|-------------|-------------|----------------------------------|-----|
| 1    | 05-51028-03 | 61-080-045  | WING FRONT BEAM, RH              | 1   |
| 2    | 05-51025-03 | 61-080-042  | ASSY, RH STIFF ARM WING          | 1   |
| 3    | 05-51026-02 | 61-080-044  | WING, LONG BRACE                 | 1   |
| 4    | 05-51037-03 | -           | TOOL SLIDE, RH (2007)            | (1) |
|      | -           | 61-080-035  | TOOL SLIDE, RH (2008)            | 1   |
| 5    | 05-51034-01 | 61-080-047  | WING TRANSPORT SUPPORT           | 1   |
| 6    | 31-10608-01 | 61-050-024  | PIN, 7/8" X 6.5" USBL HITCH      | 1   |
| 7    | 31-50163-12 | 48-090950   | CAPSCREW, 5/8 X 2 G5 PLT         | 16  |
| 8    | -           | 68-010320   | NUT, 5/8 TECHLOCK FLANGE GRD "G" | 16  |
| 9    | 31-50150-17 | 48-090603   | CAPSCREW, 1/2 X 2 NC G8 PLT      | 4   |
| 10   | 31-50250-08 | 72-020127   | LOCKNUT, 1/2 NC STOVER G"C" PLT  | 4   |
| 11   | 31-50199-03 | 48-200325   | CAPSCREW, 1 X 4 1/2 G8 PLT       | 1   |
| 12   | 05-51011-01 | 61-026-024  | BUSHING LONG                     | 1   |
| 13   | 31-50299-05 | 72-030100   | 1" UNITORQUE NUT G8 PLT          | 2   |



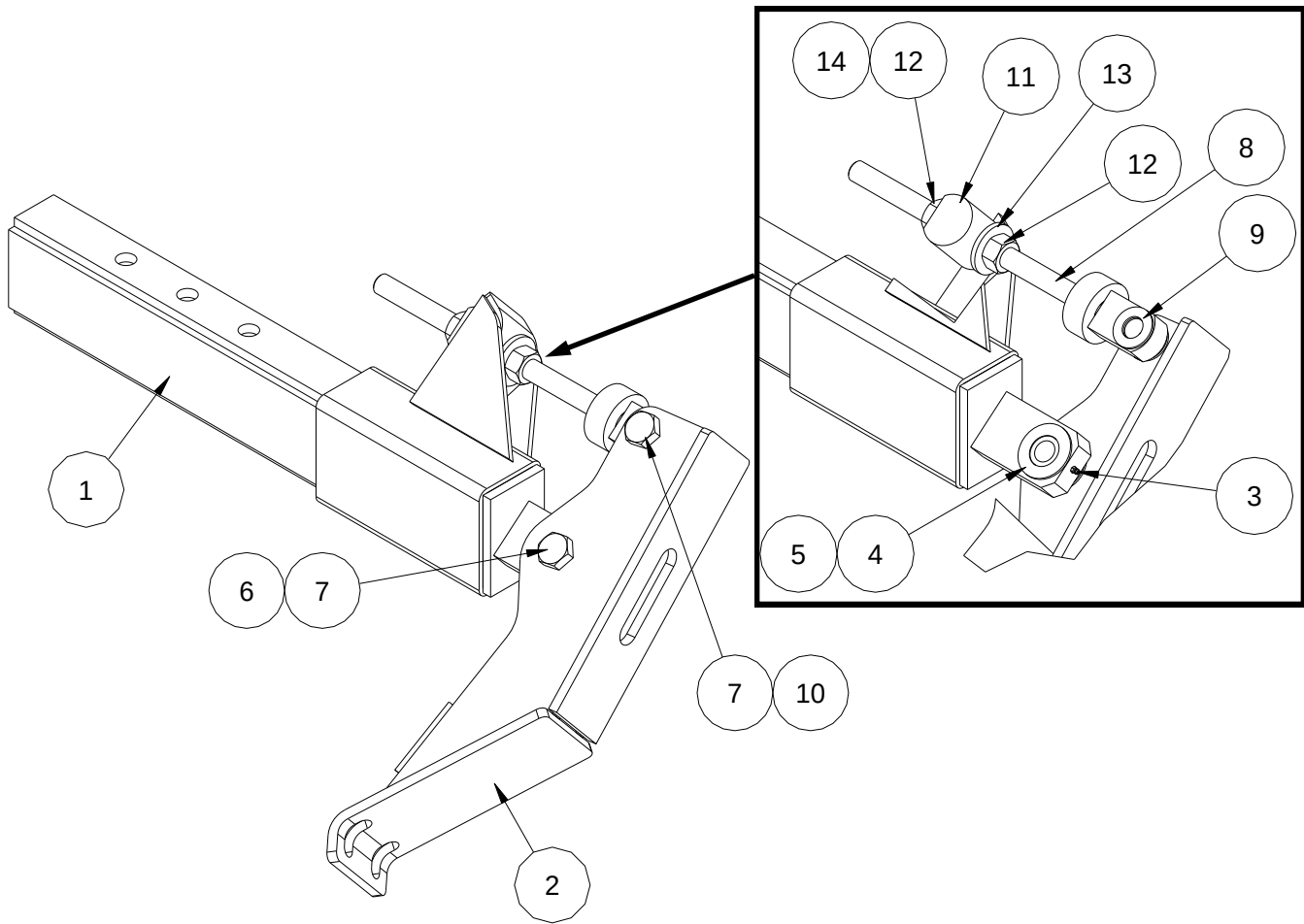
45' ROTARY HARROW

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                | QTY |
|------|-------------|-------------|----------------------------|-----|
| 14   | 31-50199-09 | -           | CAPSCREW, 1 X 7 1/2 G8 PLT | 1   |
| 15   | 05-01648-01 | 61-050-012  | WASHER, THRUST-UHMW        | 1   |

**RIGHT FLIP-OVER WING**

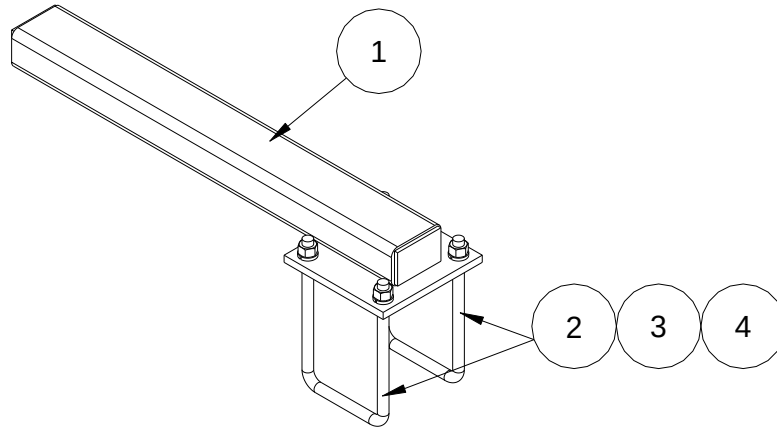


| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                    | QTY |
|------|-------------|-------------|--------------------------------|-----|
| 1    | -           | 61-081-003  | TOOL TENSIONER EXTENSION, RT   | 1   |
| 2    | 05-51115-00 | 61-080-075  | FLIP-OVER WING RH              | 1   |
| 3    | 31-10608-01 | 61-050-024  | PIN, 7/8" X 6.5" USBL HITCH    | 1   |
| 4    | 05-51018-01 | 61-080-039  | PLATED PIN, 1 X 5 1/2          | 1   |
| 5    | 05-51051-01 | 61-080-061  | HINGE BOLT, 8 15/32 OVERALL    | 1   |
| 6    | 31-50599-04 | 61-050-036  | 1" PLASTIC WASHER              | 5   |
| 7    | 05-51015-01 | 61-024-038  | SPACER, PLATED                 | 1   |
| 8    | -           | 62-020050   | FLATWASHER, 1" SAE PLT         | 3   |
| 9    | 30-90376-24 | 61-027-047  | WASHER, 2.0 X .9 X .375        | 2   |
| 10   | -           | 72-020115   | LOCKNUT, 7/8 NYLON INSERT PLT  | 2   |
| 11   | 05-51052-01 | 61-080-062  | HINGE BOLT, 6" OVERALL         | 1   |
| 12   | -           | 02-050-007  | PIN, 1/4 X 1 1/2 ROLL-ZINC PLT | 1   |
| 13   | -           | 76-010200   | COTTER PIN, 1/4 X 2            | 1   |

**RIGHT TOOL TENSIONER EXTENSION**

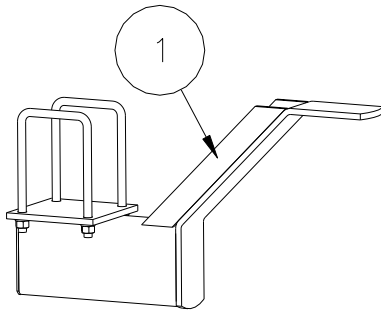
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                   | QTY |
|------|-------------|-------------|-------------------------------|-----|
| 1    | 05-51121-00 | 61-080-080  | RH WING EXTENSION             | 1   |
| 2    | 05-51097-00 | 61-080-071  | TOOL LEVER, LONG STROKE       | 1   |
| 3    | -           | 02-050-005  | FITTING, 1/4-28 GREASE        | 1   |
| 4    | 05-01648-01 | 61-050-012  | THRUST WASHER                 | 2   |
| 5    | 05-01646-01 | 61-026-023  | BUSHING, HARDENED             | 1   |
| 6    | 31-50299-05 | 72-030100   | LOCKNUT, 1 STOVER GD C PLT    | 1   |
| 7    | -           | 48-200350   | CAPSCREW, 1 X 5 G8 PLT        | 2   |
| 8    | 05-51098-00 | 61-080-072  | TENSION ROD, LONG STROKE, PLT | 1   |
| 9    | 31-50399-04 | 61-050-036  | 1" PLASTIC WASHER             | 2   |
| 10   | -           | 72-010140   | LOCKNUT, 1 NYLON              | 1   |
| 11   | 71-51004-00 | 61-026-025  | BUSHING, TENSION ROD          | 1   |
| 12   | -           | 68-010460   | HEX NUT, 1 G8 PLT             | 1   |
| 13   | 71-51003-00 | 61-050-039  | WASHER, ROD SUPPORT           | 1   |
| 14   | -           | 62-020075   | WASHER, 1 HARDENED SAE PLT    | 1   |

**WING TOOL CATCHER (PRIOR TO 2007)  
(2 PER MACHINE)**

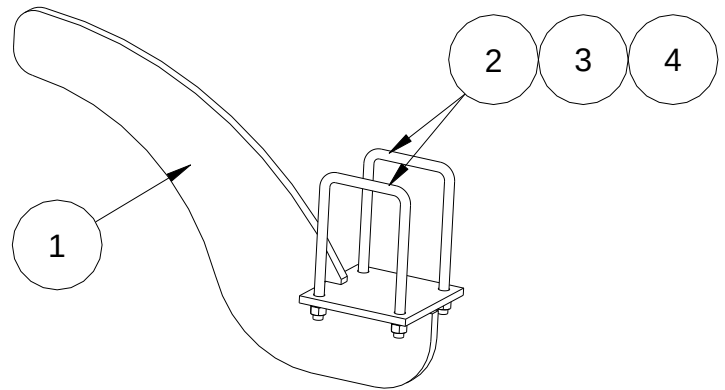


| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                    | QTY |
|------|-------------|-------------|--------------------------------|-----|
| 1    | 05-51036-01 | -           | WING TOOL CATCHER              | 1   |
| 2    | 31-10946-19 | -           | U-BOLT, 1/2 X 4 9/16W X 7 1/4L | 2   |
| 3    | 31-50350-01 | -           | LOCKWASHER, 1/2                | 4   |
| 4    | 31-50250-01 | -           | HEX NUT, 1/2                   | 4   |

**WING TOOL CATCHER (2007)  
(4 PER MACHINE)**



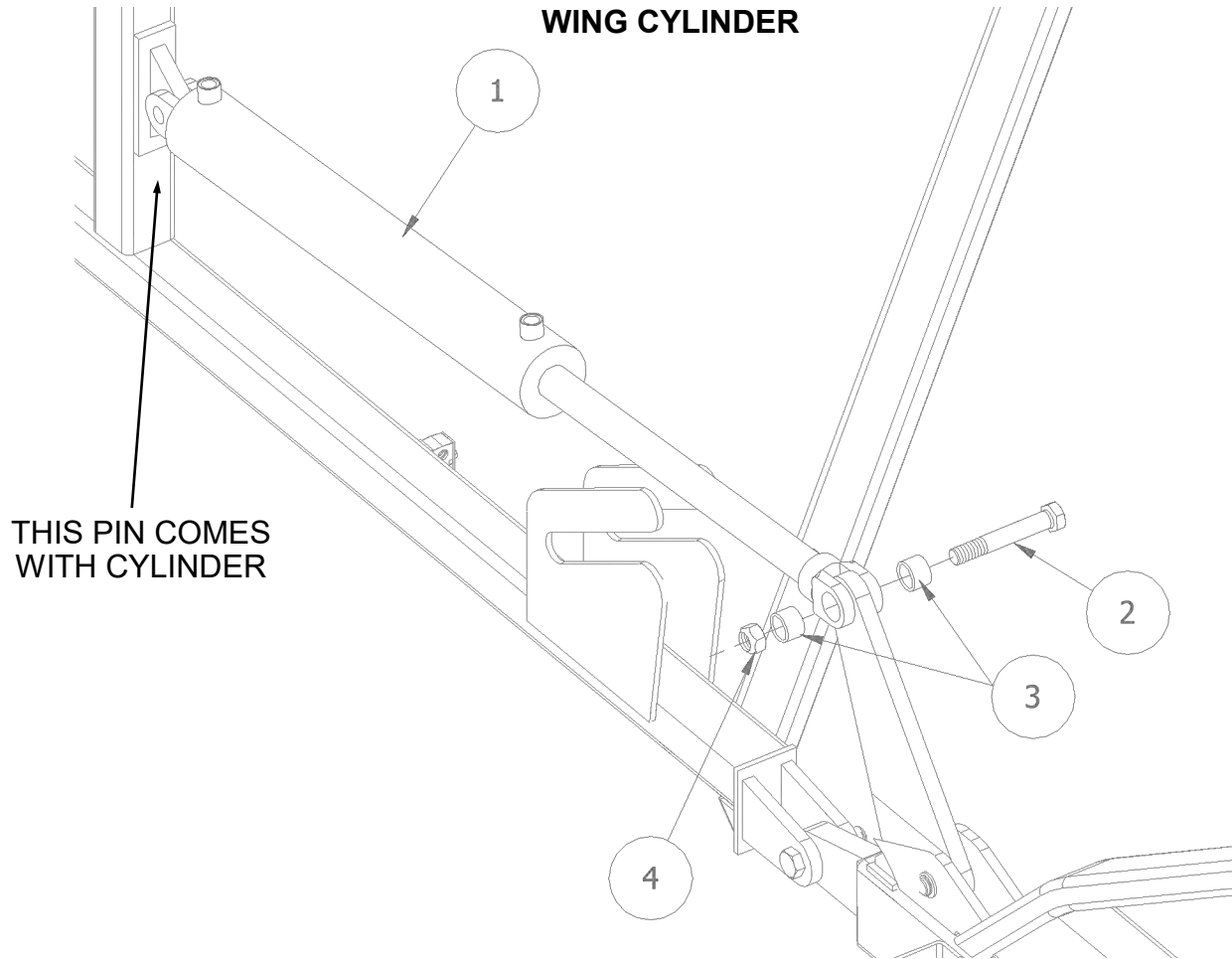
**WING TOOL CATCHER (2008 TO PRESENT)  
(2 PER MACHINE)**



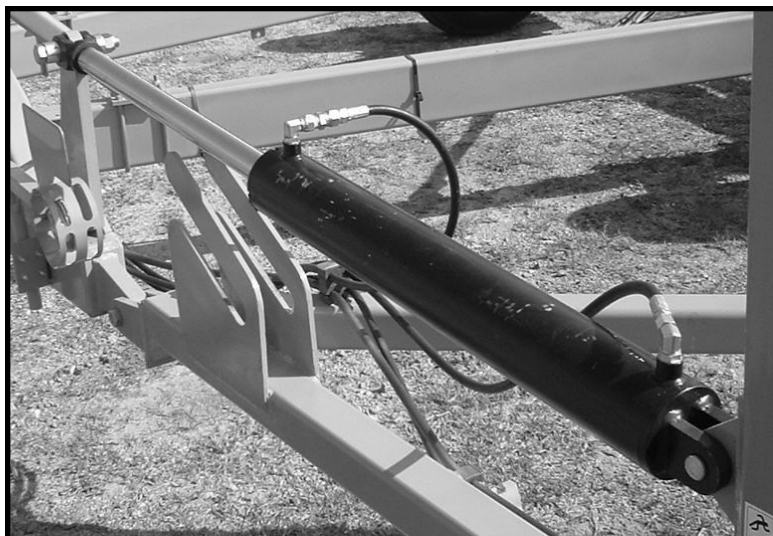
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                    | QTY |
|------|-------------|-------------|--------------------------------|-----|
| 1    | -           | 61-080-014  | WING TOOL CATCHER (2007)       | 1   |
|      | -           | 61-080-053  | WING TOOL CATCHER (2008)       |     |
| 2    | 31-10946-19 | 61-050-029  | U-BOLT, 1/2 X 4 9/16W X 7 1/4L | 2   |
| 3    | 31-50350-01 | 66-010250   | LOCKWASHER, 1/2                | 4   |
| 4    | 31-50250-01 | 68-010250   | HEX NUT, 1/2                   | 4   |

# 45' ROTARY HARROW

## WING CYLINDER

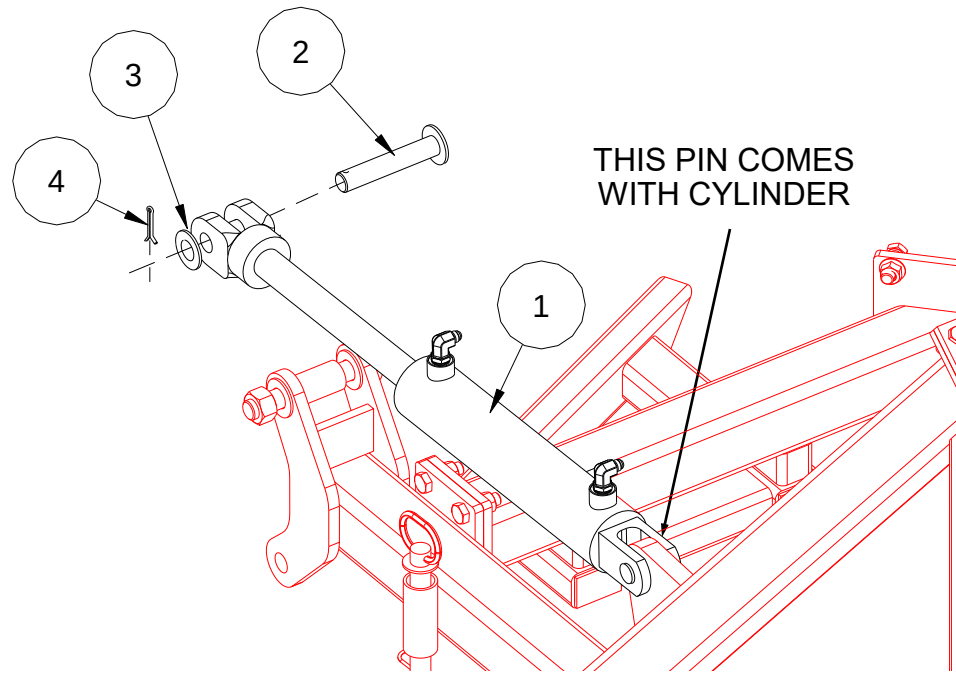


| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | 31-10517-04 | 61-061-014  | 4 X 30 HYD CYLINDER ( -2013) | (1) |
|      | -           | 61-061-027  | 4 X 30 HYD CYLINDER (2014- ) | 1   |
| 2    | -           | 48-200500   | CAPSCREW, 1 X 6 1/2 G8 PLT   | 1   |
| 3    | 05-51013-01 | 61-024-041  | LEVEL GUIDE, PLT             | 2   |
| 4    | 31-50299-05 | 72-030100   | LOCKNUT, 1" TOPLOCK G8 PLT   | 1   |



# 45' ROTARY HARROW

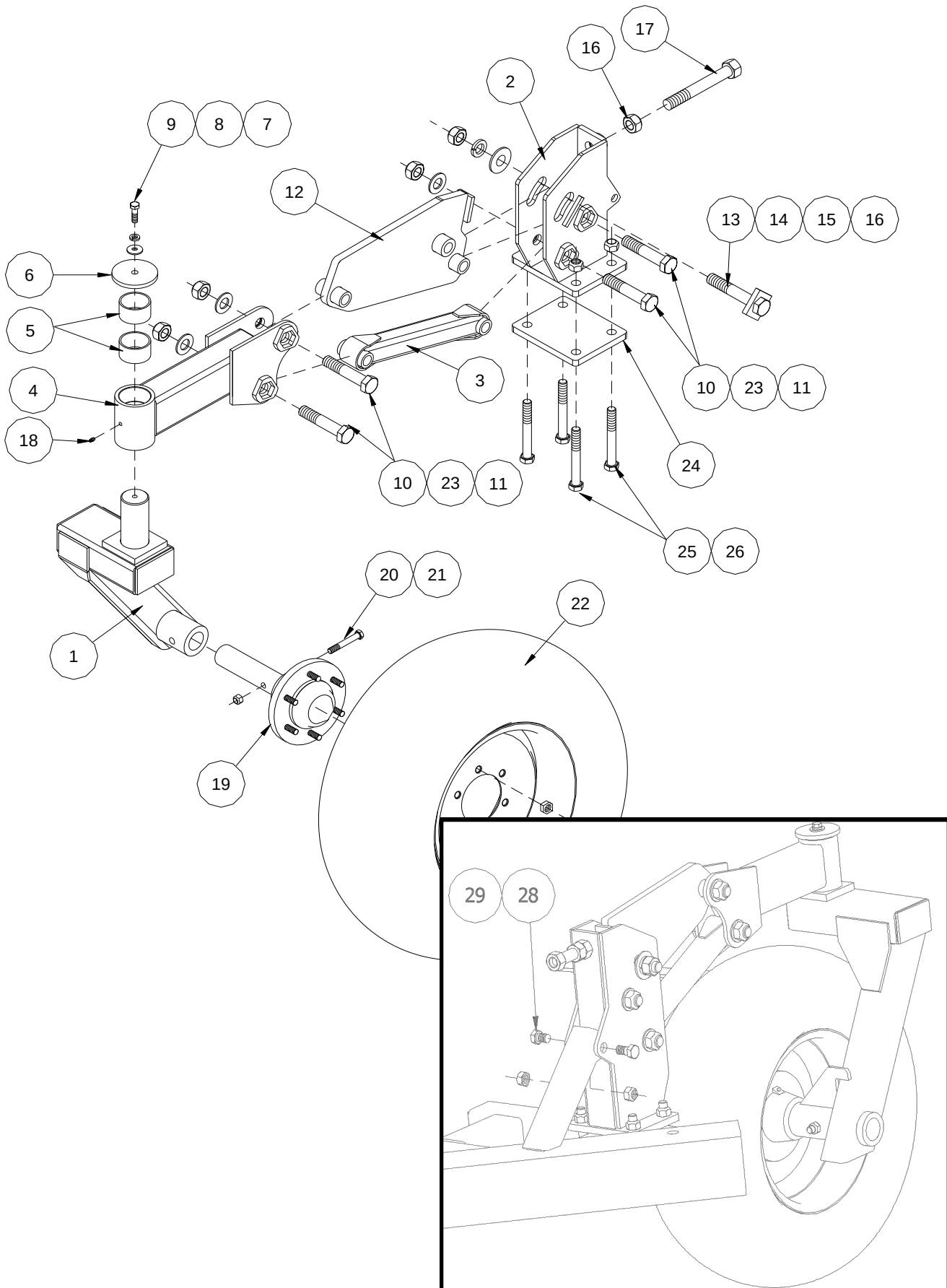
## FLIP-OVER WING CYLINDER



| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | 31-10517-03 | 61-061-011  | 3 X 12 HYD CYLINDER ( -2013) | (1) |
|      | -           | 61-061-025  | 3 X 12 HYD CYLINDER (2014- ) | 1   |
| 2    | 05-51018-01 | 61-080-039  | PLATED PIN , 1 X 5 1/2       | 1   |
| 3    | -           | 62-020050   | FLATWASHER, 1 SAE PLT        | 1   |
| 4    | -           | 76-010200   | COTTER PIN, 1/4 X 2          | 1   |



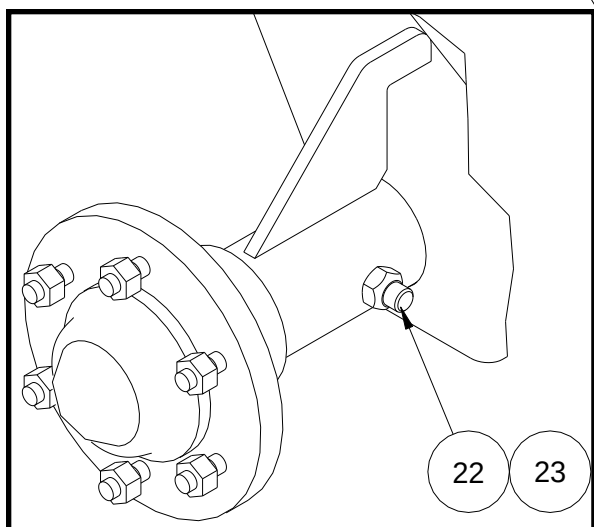
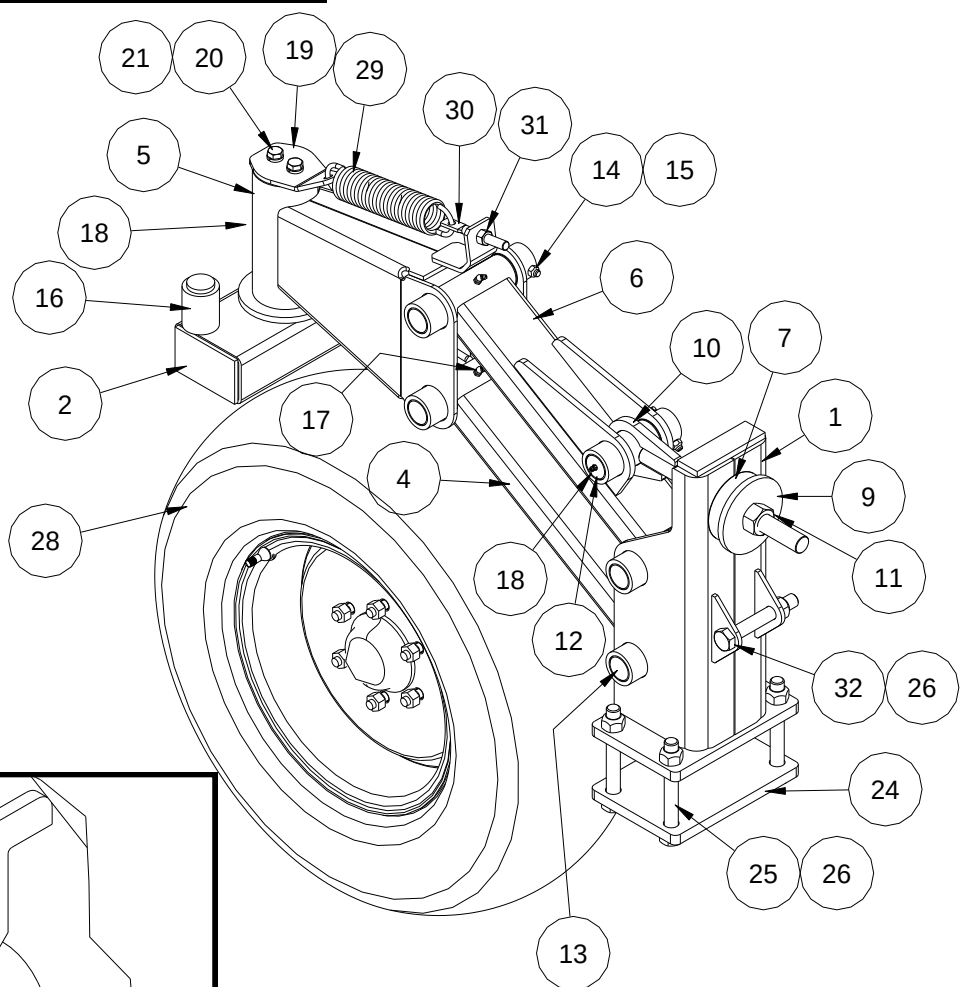
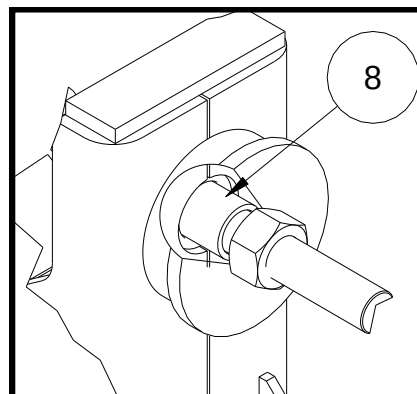
**WING CASTER WHEEL ASSEMBLY (61-081-004)**  
(PRIOR TO 2007)



## 45' ROTARY HARROW

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                     | QTY |
|------|-------------|-------------|---------------------------------|-----|
| 1    | 05-51079-01 | -           | SWIVEL, CASTER WHEEL            | 1   |
| 2    | 05-51058-01 | -           | CASTER BRKT, WITH LINKS         | 1   |
| 3    | 05-51095-01 | 61-080-025  | ARM, LOWER CASTER               | 1   |
| 4    | 05-51057-01 | -           | CASTER BUSHING ARM              | 1   |
| 5    | 05-01873-01 | 61-050-013  | CASTER BUSHING                  | 2   |
| 6    | 05-01142-01 | 61-027-035  | SPRING CAP, CASTER              | 1   |
| 7    | -           | 62-010200   | FLATWASHER, 1/2 STD PLT         | 1   |
| 8    | -           | 66-010250   | LOCKWASHER, 1/2 REG PLT         | 1   |
| 9    | -           | 48-090595   | CAPSCREW, 1/2 X 1 1/2 NC G5 PLT | 1   |
| 10   | -           | 48-200350   | CAPSCREW, 1 X 5 G8 PLT          | 4   |
| 11   | 31-50299-05 | 72-030100   | LOCKNUT, 1" NC STOVER G"C" PLT  | 4   |
| 12   | 05-51100-01 | -           | CASTER, UPPER ARM               | 1   |
| 13   | 05-51044-01 | 61-080-028  | LOCK BOLT, CASTER WHEEL         | 1   |
| 14   | 31-50399-01 | 62-010370   | FLATWASHER, 1" STD PLT          | 1   |
| 15   | 31-50399-02 | 66-010450   | LOCKWASHER, 1" PLT              | 1   |
| 16   | 31-50299-02 | 68-010460   | HEX NUT, 1" PLT                 | 2   |
| 17   | 05-51061-01 | 61-080-029  | HEIGHT ADJ BOLT, 2000 CASTER    | 1   |
| 18   | 31-50904-02 | 02-050-005  | FITTING, 1/4-28 STRT. GREASE    | 1   |
| *19  | 30-90544-01 | 61-058-007  | HUB AND SPINDLE ASSY 6-BOLT     | 1   |
| 20   | -           | 48-200032   | CAPSCREW, 5/8 X 4 UNC G8 PLT    | 1   |
| 21   | -           | 72-020050   | LOCKNUT, 5/8 NC STOVER G"C" PLT | 3   |
| 22   | 05-51081-01 | 61-081-036  | SMOOTH TIRE & RIM               | 1   |
| 23   | 31-50399-03 | 62-020050   | FLATWASHER, 1 SAE PLT           | 4   |
| 24   | 30-90376-09 | 61-023-023  | BOTTOM PLATE, CASTER BRACKET    | 1   |
| 25   | 31-50175-09 | 48-200058   | CAPSCREW, 3/4 X 6 NC G8 PLT     | 4   |
| 26   | -           | 72-020128   | LOCKNUT, 3/4 STOVER G"C" PLT    | 4   |
| 27   | 31-50163-14 | 48-200042   | 5/8 X 1 1/2 CAPSCREW            | 2   |
| 28   | -           | 48-091273   | CAPSCREW, 3/4 X 1 1/2 G5 PLT    | 2   |
| 29   | -           | 72-020128   | LOCKNUT, 3/4 STOVER G"C" PLT    | 2   |

\* For Breakdown on hub and spindle see page 7.



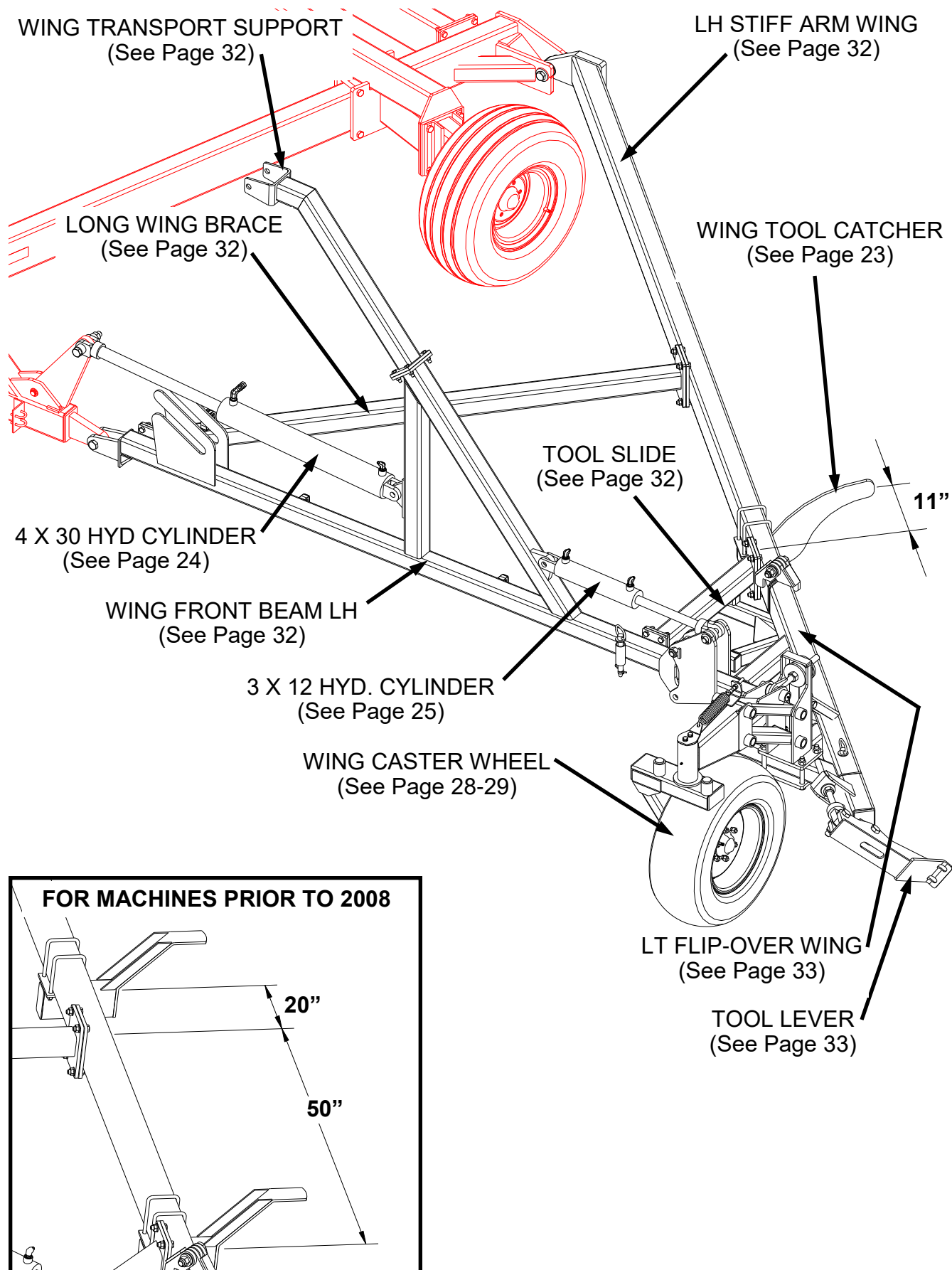


## 45' ROTARY HARROW

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                    | QTY |
|------|-------------|-------------|--------------------------------|-----|
| 1    | -           | 61-080-006  | CASTER MOUNT BRACKET WING      | 1   |
| 2    | -           | 61-080-009  | CASTER SWIVEL, H.D.            | 1   |
| 3    | -           | 61-080-007  | CASTER BUSHING ARM, H.D.       | 1   |
| 4    | -           | 61-080-010  | CASTER, LOWER LINK H.D.        | 1   |
| 5    | -           | 61-050-003  | CASTER BUSHING, H.D.           | 2   |
| 6    | -           | 61-080-011  | CASTER, UPPER LINK, H.D.       | 1   |
| 7    | -           | 61-026-012  | CASTER, CUSHION BLOCK, H.D.    | 2   |
| 8    | -           | 61-024-016  | SPACER, CUSHION BLOCK, H.D.    | 1   |
| 9    | -           | 61-027-020  | WASHER, CUSHION BLOCK, H.D.    | 2   |
| 10   | -           | 61-080-012  | HEIGHT ADJUSTMENT, H.D.        | 1   |
| 11   | -           | 68-010460   | HEX NUT, 1" G8 PLT             | 2   |
| 12   | -           | 61-026-011  | SHORT PIVOT PIN, H.D.          | 1   |
| 13   | -           | 61-026-010  | LONG PIVOT PIN, H.D.           | 4   |
| 14   | -           | 48-090220   | CAPSCREW, 3/8 X 2 1/2 G5 PLT   | 5   |
| 15   | -           | 72-010050   | LOCKNUT, 3/8 STOVER GB PLT     | 5   |
| 16   | -           | 61-059-001  | CASTER BUMPER, H.D.            | 2   |
| 17   | -           | 02-050-017  | FITTING, 1/4-28 45 DEG.        | 4   |
| 18   | -           | 02-050-005  | FITTING, 1/4-28 STRT GREASE    | 2   |
| 19   | -           | 61-027-021  | CASTER CAP, H.D.               | 1   |
| 20   | -           | 66-010250   | LOCKWASHER, 1/2 REG PLT        | 2   |
| 21   | -           | 48-090592   | CAPSCREW, 1/2 X 1 1/4 G5 PLT   | 2   |
| 22   | -           | 48-091060   | CAPSCREW, 5/8 X 4 G5 PLT       | 1   |
| 23   | -           | 72-020050   | LOCKNUT, 5/8 STOVER GC PLT     | 3   |
| 24   | -           | 61-027-011  | BASE PLATE, H.D. CASTER        | 1   |
| 25   | 31-50175-09 | 48-200058   | CAPSCREW, 3/4 X 6 G8 PLT       | 4   |
| 26   | -           | 72-020128   | LOCKNUT, 3/4 STOVER, GC PLT    | 4   |
| 27   | 30-90544-01 | 61-058-007  | HUB AND SPINDLE 6-BOLT         | 1   |
| 28   | 05-51081-01 | 61-081-036  | SMOOTH TIRE & RIM 15" X 6-BOLT | 1   |
| 29   | -           | 61-050-004  | SPRING, TENSION CASTER         | 1   |
| 30   | -           | 61-050-005  | ANCHOR, SPRING, CASTER         | 1   |
| 31   | -           | 68-010260   | HEX NUT, 1/2 G8 PLT            | 2   |
| 32   | 31-50175-14 | 48-200057   | BOLT, 3/4 X 5 G8 PLT           | 1   |

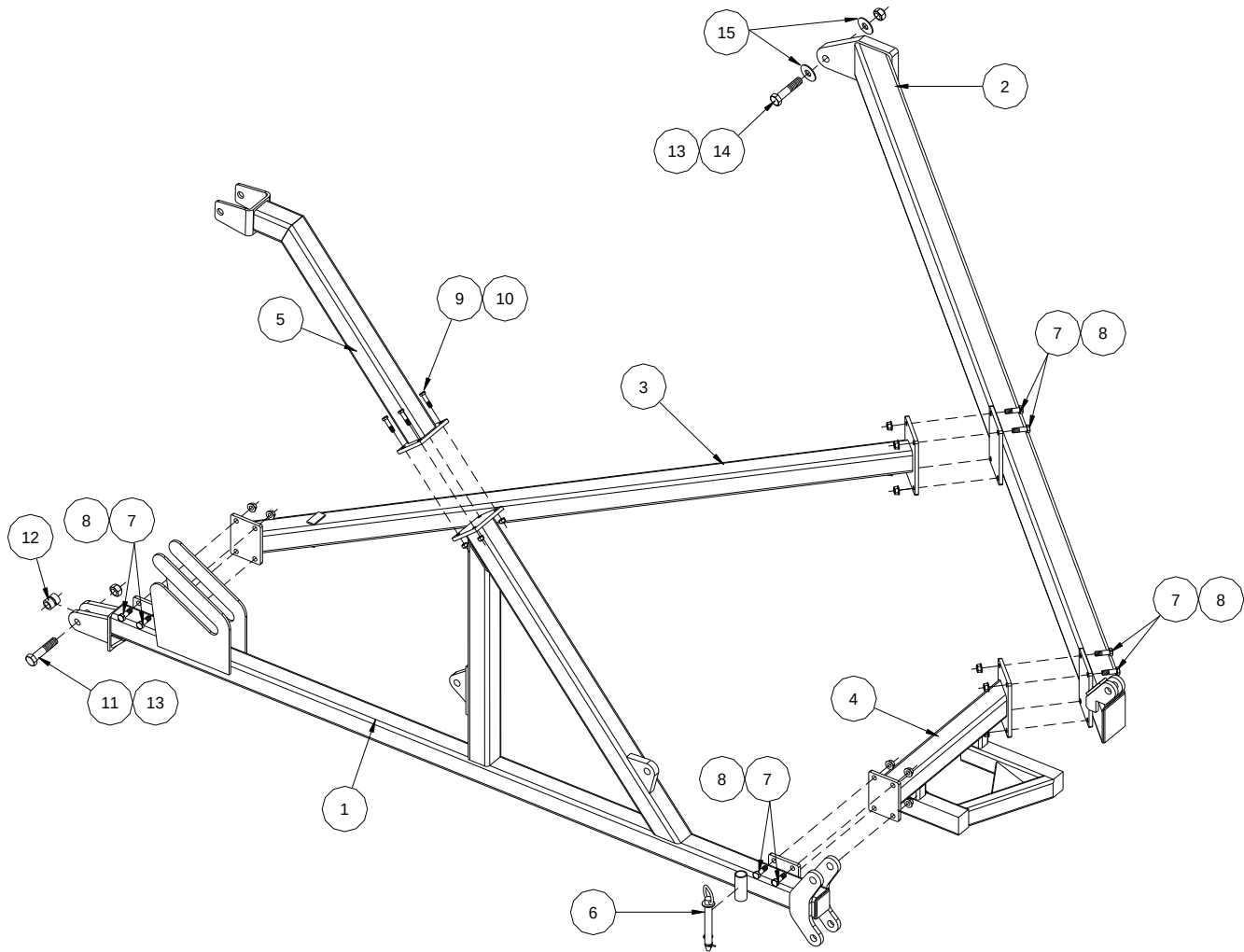
BLANK  
PAGE

## LEFT WING ASSEMBLY



# 45' ROTARY HARROW

## LEFT WING MAIN FRAME

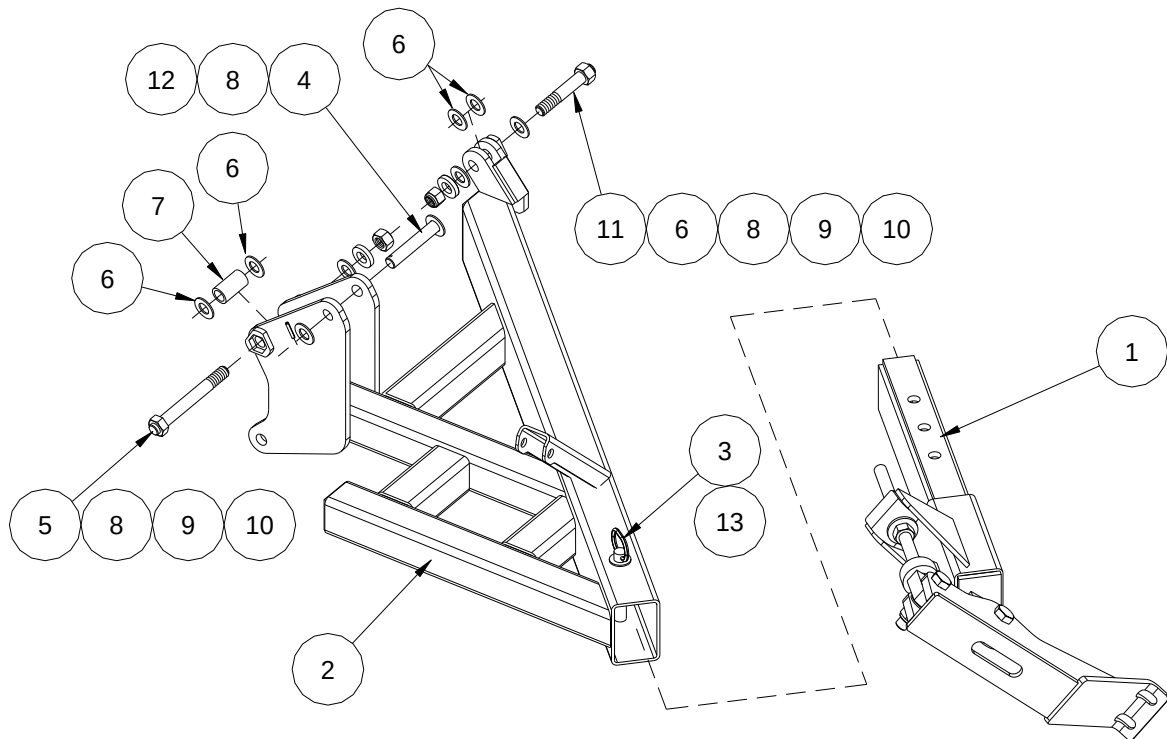


| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                         | QTY |
|------|-------------|-------------|-------------------------------------|-----|
| 1    | 05-51028-04 | 61-080-046  | WING FRONT BEAM, LH                 | 1   |
| 2    | 05-51025-04 | 61-080-043  | ASSY, LH STIFF ARM WING             | 1   |
| 3    | 05-51026-02 | 61-080-044  | WING, LONG BRACE                    | 1   |
| 4    | 05-51037-04 | -           | TOOL SLIDE, LH (2007)               | (1) |
|      | -           | 61-080-034  | TOOL SLIDE, LH (2008)               | 1   |
| 5    | 05-51034-02 | 61-080-047  | WING TRANSPORT SUPPORT LH           | 1   |
| 6    | 31-10608-01 | 61-050-024  | PIN, 7/8" X 6.5" USBL HITCH         | 1   |
| 7    | 31-50163-12 | 48-090050   | CAPSCREW, 5/8 X 2 NC G5 PLT         | 16  |
| 8    | -           | 68-010320   | NUT, 5/8 NC FLNG TECHLOCK GRD G PLT | 16  |
| 9    | 31-50150-17 | 48-090603   | CAPSCREW, 1/2 X 2 NC G8 PLT         | 4   |
| 10   | 31-50250-08 | 72-020127   | LOCKNUT, 1/2 NC STOVER G"C" PLT     | 4   |
| 11   | 31-50199-03 | 48-200325   | CAPSCREW, 1 X 4 1/2 G8 PLT          | 1   |

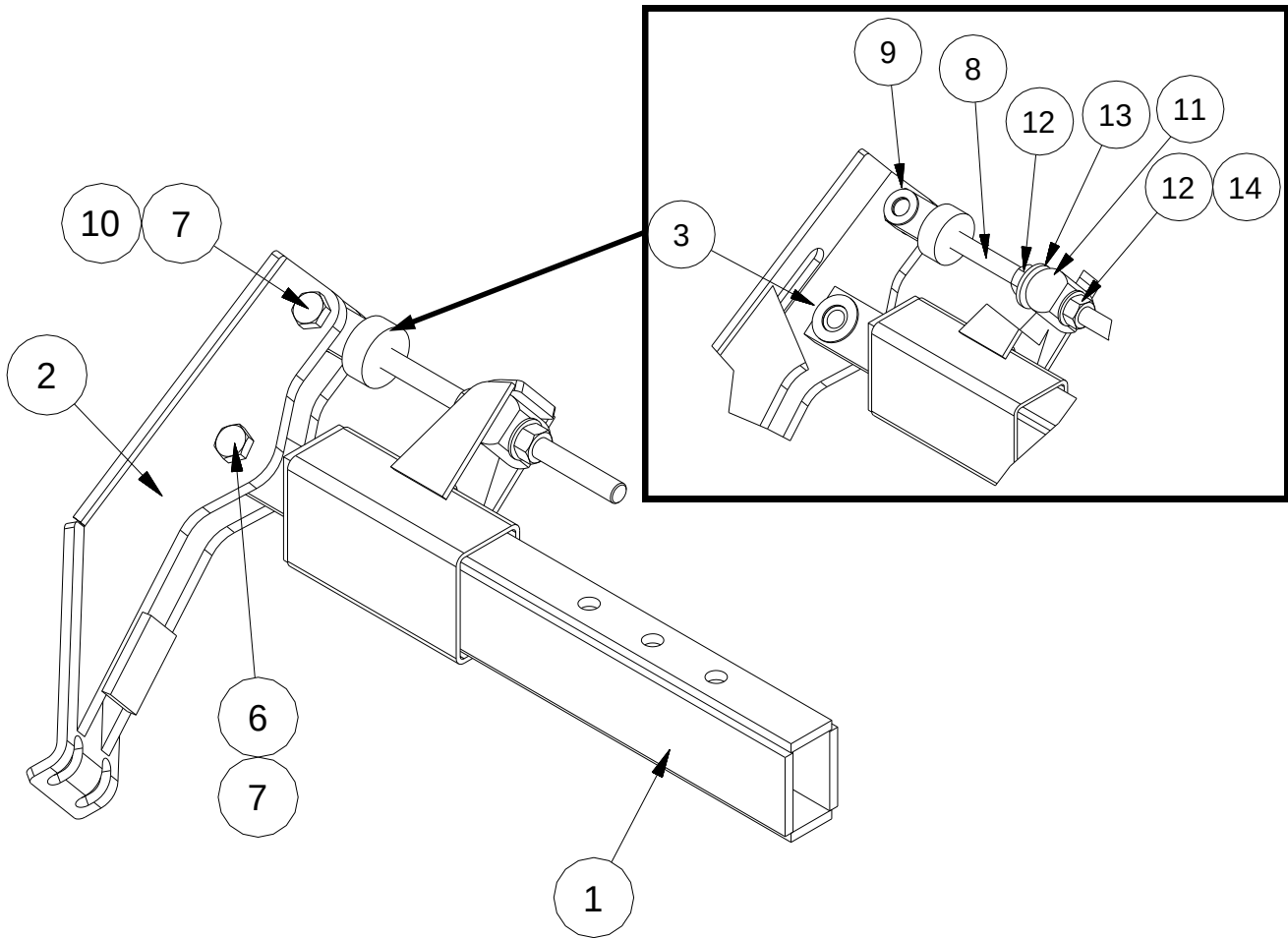
45' ROTARY HARROW

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                | QTY |
|------|-------------|-------------|----------------------------|-----|
| 12   | 05-51011-01 | 61-026-024  | BUSHING LONG               | 1   |
| 13   | 31-50299-05 | -           | LOCKNUT, 1" TOPLOCK G8 PLT | 2   |
| 14   | 31-50199-09 | -           | CAPSCREW, 1 X 7 1/2 G8 PLT | 1   |
| 15   | 05-01648-01 | 61-050-012  | WASHER, THRUST-UHMW        | 1   |

**LEFT FLIP-OVER WING**

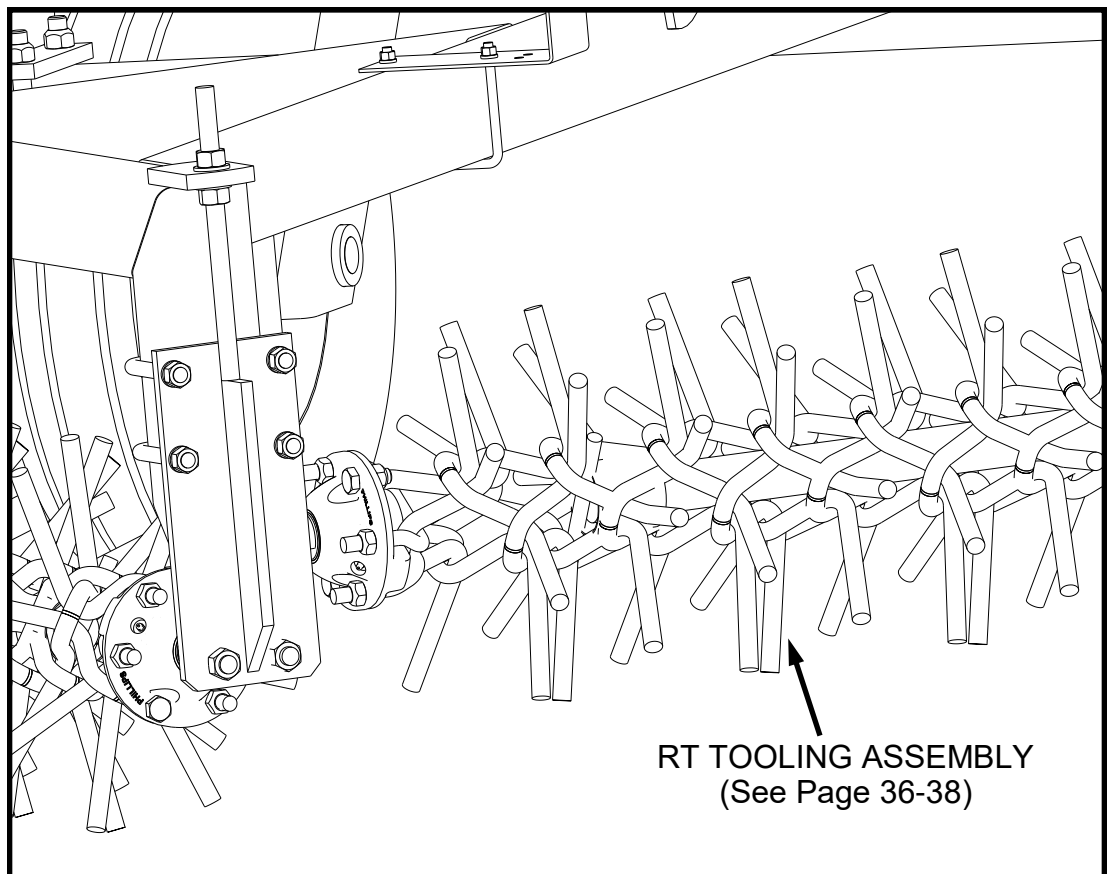
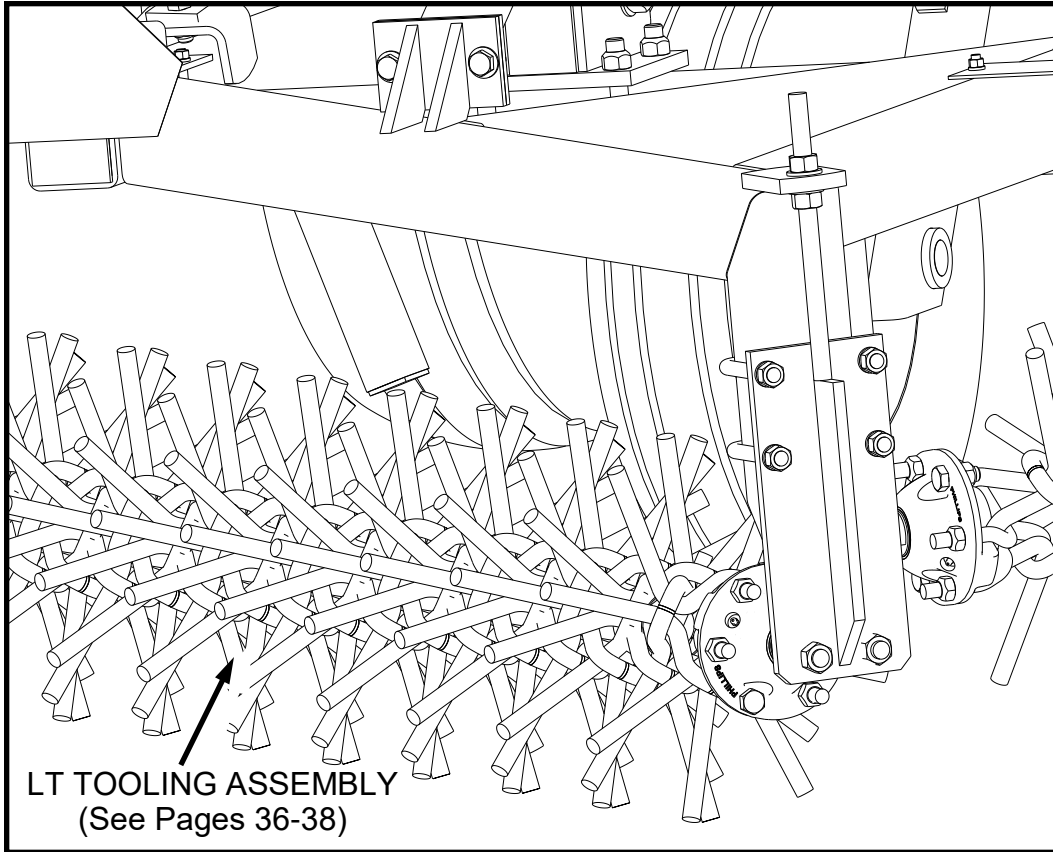


| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                    | QTY |
|------|-------------|-------------|--------------------------------|-----|
| 1    | -           | 61-081-002  | TOOL TENSIONER EXTENSION, LT   | 1   |
| 2    | 05-51114-00 | 61-080-074  | FLIP-OVER WING LT              | 1   |
| 3    | 31-10608-01 | 61-050-024  | PIN, 7/8" X 6.5" USBL HITCH    | 1   |
| 4    | 05-51018-01 | 61-080-039  | PLATED PIN, 1 X 5 1/2          | 1   |
| 5    | 05-51051-01 | 61-080-061  | HINGE BOLT, 8 15/32 OVERALL    | 1   |
| 6    | 31-50599-04 | 61-050-036  | FLATWASHER, 1" UHMW            | 5   |
| 7    | 05-51015-01 | 61-024-038  | SPACER, PLATED                 | 1   |
| 8    | -           | 62-020050   | FLATWASHER, 1" SAE PLT         | 3   |
| 9    | 30-90376-24 | 61-027-047  | WASHER, 2.0 X .9 X .375        | 2   |
| 10   | -           | 72-020115   | LOCKNUT, 7/8 NYLON INSERT PLT  | 2   |
| 11   | 05-51052-01 | 61-080-062  | HINGE BOLT, 6" OVERALL         | 1   |
| 12   | -           | 02-050-007  | PIN, 1/4 X 1 1/2 ROLL-ZINC PLT | 1   |
| 13   | -           | 76-010200   | COTTER PIN, 1/4 X 2            | 1   |

**LEFT TOOL TENSIONER EXTENSION**

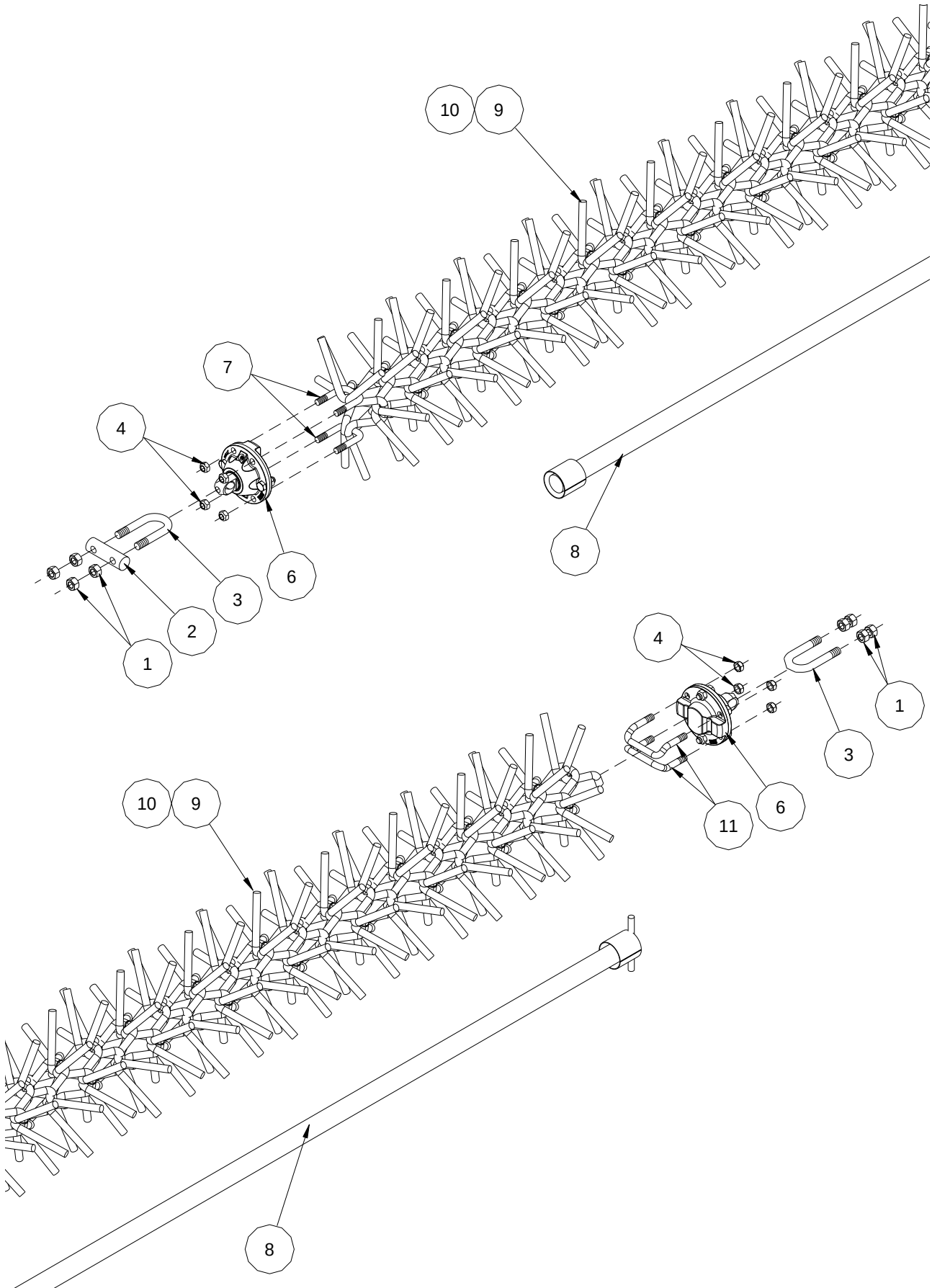
| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                   | QTY |
|------|-------------|-------------|-------------------------------|-----|
| 1    | 05-51122-00 | 61-080-081  | LH WING EXTENSION             | 1   |
| 2    | 05-51097-00 | 61-080-071  | TOOL LEVER, LONG STROKE       | 1   |
| 3    | -           | 02-050-005  | FITTING, 1/4-28 GREASE        | 1   |
| 4    | 05-01648-01 | 61-050-012  | THRUST WASHER                 | 2   |
| 5    | 05-01646-01 | 61-026-023  | BUSHING, HARDENED             | 1   |
| 6    | 31-50299-05 | 72-030100   | LOCKNUT, 1 STOVER G"C" PLT    | 1   |
| 7    | -           | 48-200350   | CAPSCREW, 1 X 5 G8 PLT        | 2   |
| 8    | 05-51098-00 | 61-080-072  | TENSION ROD, LONG STROKE, PLT | 1   |
| 9    | 31-50399-04 | 61-050-036  | 1" PLASTIC WASHER             | 2   |
| 10   | -           | 72-010140   | LOCKNUT, 1 NYLON              | 1   |
| 11   | 71-51004-00 | 61-026-025  | BUSHING, TENSION ROD          | 1   |
| 12   | -           | 68-010460   | HEX NUT, 1 G8 PLT             | 1   |
| 13   | 71-51003-00 | 61-050-039  | WASHER, ROD SUPPORT           | 1   |
| 14   | -           | 62-020075   | WASHER, 1 HARDENED SAE PLT    | 1   |

## LEFT & RIGHT TOOLING ASSEMBLY



45' ROTARY HARROW

LEFT & RIGHT SIDE TOOLING ASSEMBLY





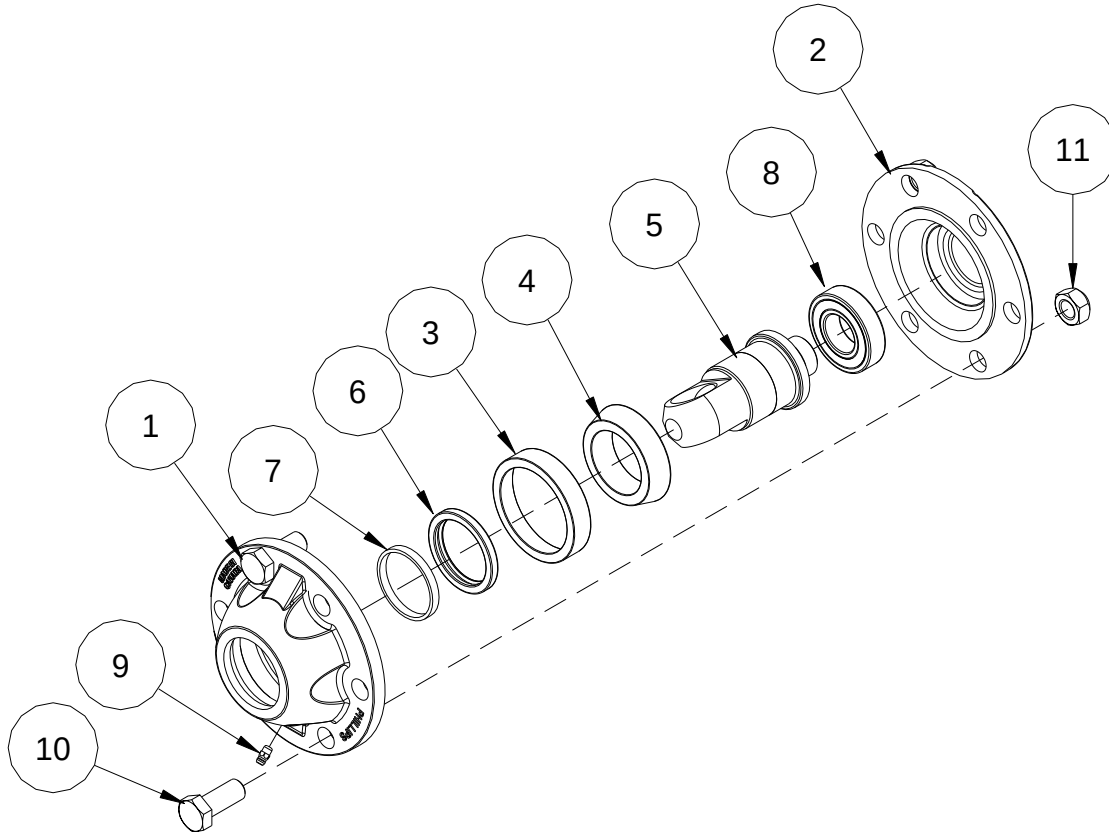
**RIGHT SIDE TOOLING ASSEMBLY**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                           | QTY      |
|------|-------------|-------------|---------------------------------------|----------|
| 1    | 31-50275-02 | 68-010380   | 3/4 UNC HEX NUT G8 PLT                | 8        |
| 2    | 71-41500-00 | 61-026-022  | SHAFT BEARING HOUSING MOUNT, PLT      | 1        |
| 3    | 31-10945-03 | 61-050-026  | 3/4-10 X 2.75W X 4.88L U-BOLT         | 2        |
| 4    | 31-50263-05 | 72-020050   | LOCKNUT, 5/8 X 2 NC STOVER GD C PLT   | 8        |
| 6    | 05-02004-00 | 61-081-032  | TOOL HOUSING ASSEMBLY, 5/8 BOLTS      | 2        |
| 7    | 31-10946-25 | 61-050-031  | U-BOLT, 5/8 X 4 11/16W X 3.5L         | 2        |
| 8    | 05-51126-00 | 61-050-058  | CABLE R.H. 4505                       | 1        |
|      | -           | -           | CABLE - 2" DIA                        | 27'-7/8" |
| 9    | 05-02002-01 | 61-050-014  | TOOL, HARROW - LARGE LH               | 138      |
| 10   | 05-02002-02 | 61-050-015  | TOOL, HARROW - LARGE RH               | 138      |
| 11   | 31-10947-03 | 61-050-032  | U-BOLT, BENT, 5/8 X 4 11/16 X 3.5L G5 | 2        |
| 12   | 05-51113-00 | 61-081-047  | TOOLING ASSEMBLY, RH 4505             | 1        |

**LEFT SIDE TOOLING ASSEMBLY**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                            | QTY      |
|------|-------------|-------------|----------------------------------------|----------|
| 1    | 31-50275-02 | 68-010380   | 3/4 UNC HEX NUT G8 PLT                 | 8        |
| 2    | 71-41500-00 | 61-026-022  | SHAFT BEARING HOUSING MOUNT, PLT       | 1        |
| 3    | 31-10945-03 | 61-050-026  | 3/4-10 X 2.75W X 4.88L U-BOLT          | 2        |
| 4    | 31-50263-05 | 72-020050   | LOCKNUT, 5/8 X 2 NC STOVER GD C PLT    | 8        |
| 6    | 05-02004-00 | 61-080-032  | TOOL HOUSING ASSEMBLY, 5/8 BOLTS       | 2        |
| 7    | 31-10946-25 | 61-080-031  | U-BOLT, 5/8 X 4 11/16W X 3.5L          | 2        |
| 8    | 05-51092-01 | 61-050-057  | CABLE L.H. 4505                        | 1        |
|      | -           | -           | CABLE - 2" DIA                         | 32'-7/8" |
| 9    | 05-02002-01 | 61-050-014  | TOOL, HARROW - LARGE LH                | 160      |
| 10   | 05-02002-02 | 61-050-015  | TOOL, HARROW - LARGE RH                | 160      |
| 11   | 31-10947-03 | 61-050-032  | U-BOLT, BENT, 5/8 X 4 11/16W X 3.5L G5 | 2        |
| 12   | 05-51132-00 | 61-081-046  | TOOLING ASSEMBLY, LH 4505              | 1        |

**TOOLING HOUSING ASSEMBLY**  
(PMF # 05-02004-00) (KMC # 16-081-032)

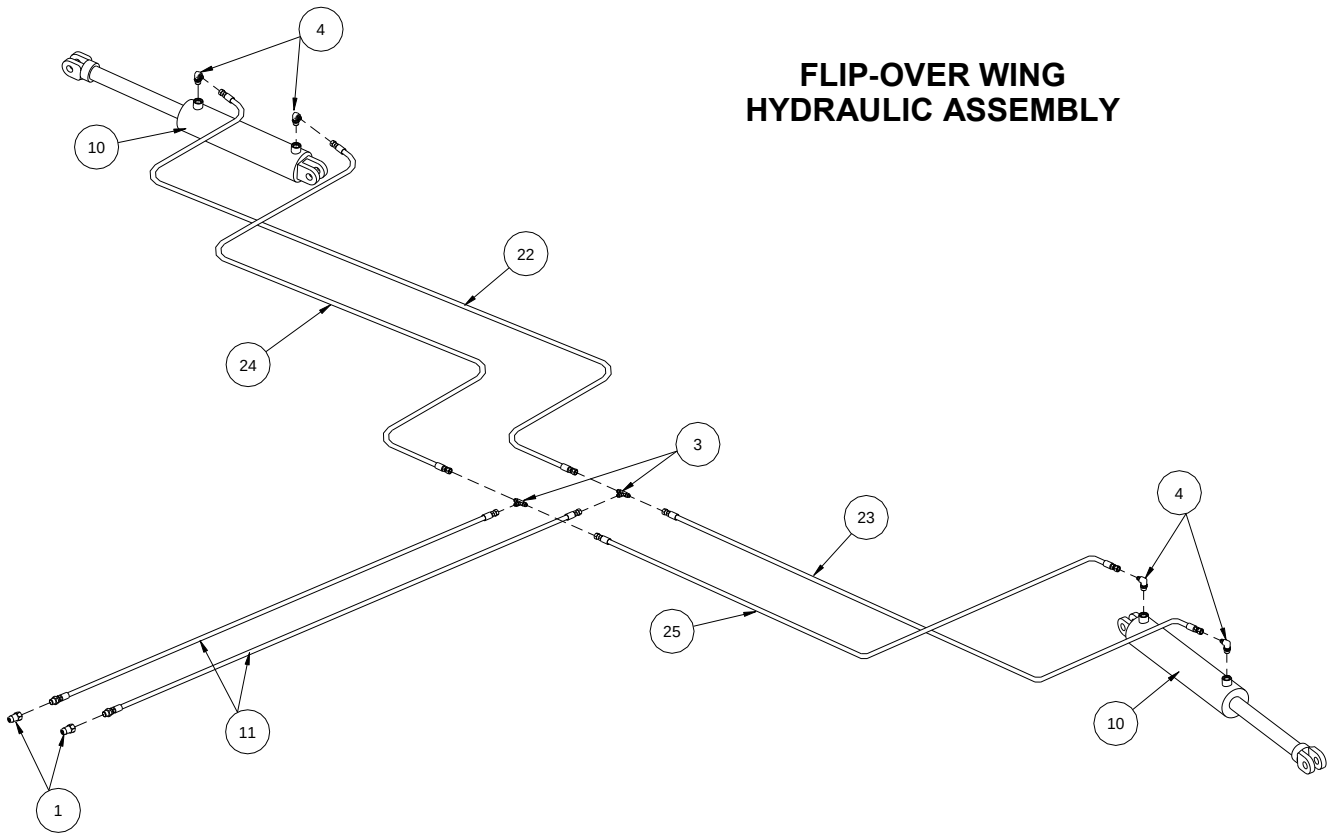


| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                       | QTY |
|------|-------------|-------------|-----------------------------------|-----|
| 1    | 05-00002-01 | 61-057-005  | BRG HSG HALF, W HOLE, 5/8 PLT     | 1   |
| 2    | 05-00001-01 | 61-057-004  | CASTING, BEARING HSG, BACK W/PADS | 1   |
| 3    | 31-10211-02 | 61-051-003  | 4T-JLM104910PK CUP                | 1   |
| 4    | 31-10211-01 | 61-051-002  | 4T-JLM104948 PK CONE              | 1   |
| 5    | 05-01287-01 | 61-026-026  | SHAFT, BRG HSG                    | 1   |
| 6    | 31-50909-05 | 61-056-002  | SEAL, CR19608                     | 1   |
| 7    | 05-01785-01 | 61-056-001  | SEAL, INSERT- BRG HSG             | 1   |
| 8    | 31-10206-01 | 61-051-001  | 6206 DDU BEARING                  | 1   |
| 9    | 31-50904-02 | 02-050-005  | FITTING, 1/4-28 STRT GREASE       | 1   |
| 10   | 31-50163-14 | 48-200042   | CAPSCREW, 5/8 X 1 1/2 NC G8 PLT   | 2   |
| 11   | 31-50263-05 | 72-020050   | LOCKNUT, 5/8 NC STOVER G"C" PLT   | 2   |

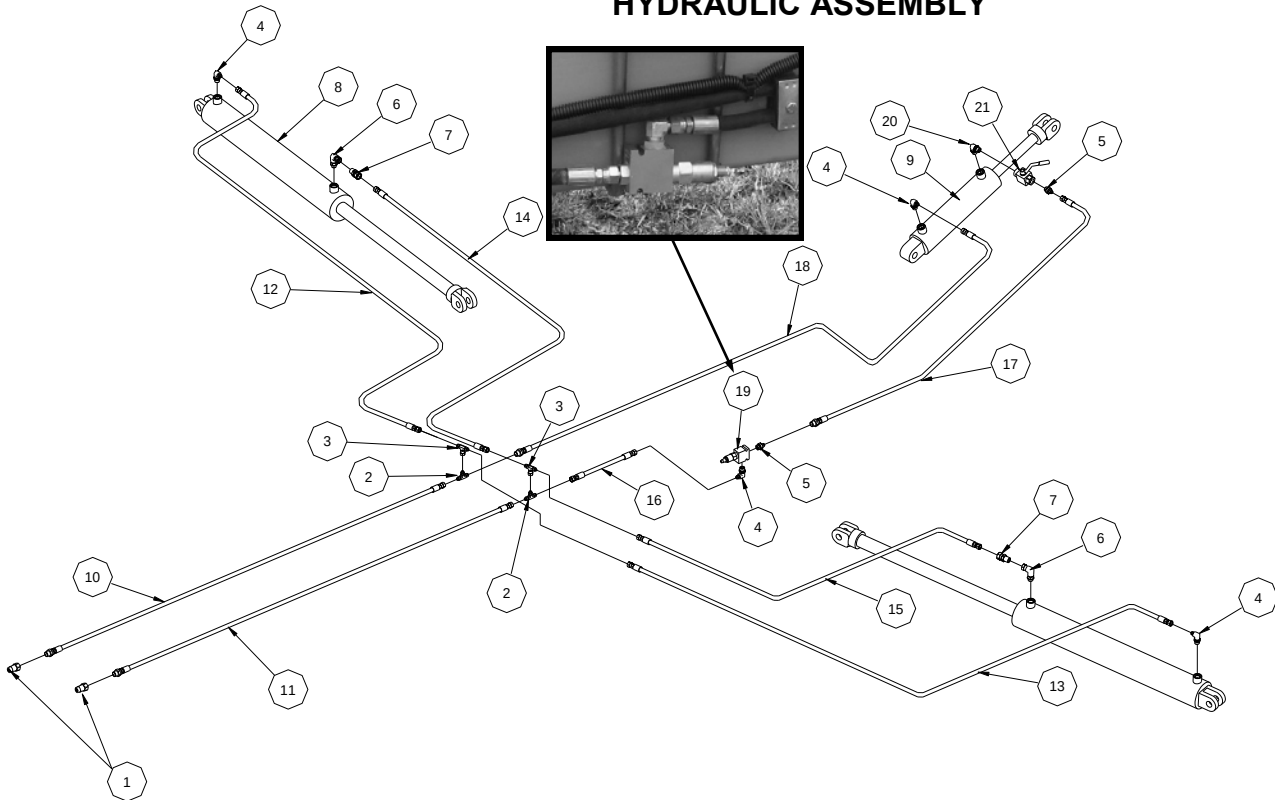
BLANK  
PAGE

# HYDRAULIC COMPONENTS

## FLIP-OVER WING HYDRAULIC ASSEMBLY



## MAIN WING & TAIL HYDRAULIC ASSEMBLY



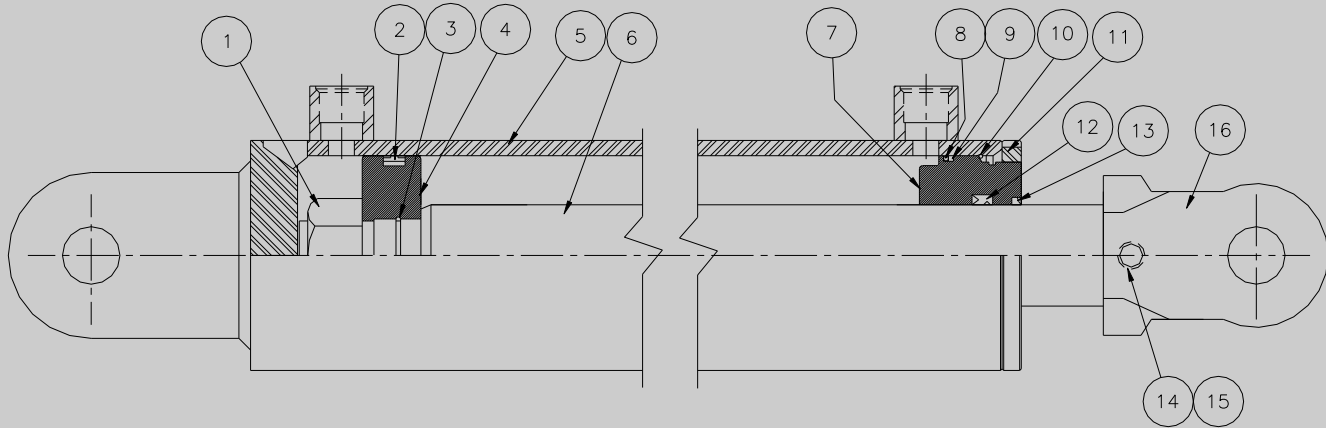
**HYDRAULIC ASSEMBLY**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                         | QTY |
|------|-------------|-------------|-------------------------------------|-----|
| 1    | 31-10530-01 | 47-059-002  | COUPLER, M-PIONEER X 1/2 F-NPT      | 4   |
| 2    | 31-10503-16 | 61-059-024  | TEE, #6 MJIC X #6 MJIC X #6FJIC     | 2   |
| 3    | 31-10503-17 | 61-059-025  | TEE, #6 MJIC X 3                    | 4   |
| 4    | 31-10503-15 | 61-059-023  | ELBOW, #8 MORB X #6 MJIC            | 8   |
| 5    | 31-10503-06 | 61-059-022  | #8 MORB - #6MJIC                    | 2   |
| 6    | 31-10503-18 | 42-059-022  | ELBOW, #8 MORB X 1/2 F-NPT          | 2   |
| 7    | 31-10551-00 | 21-059-002  | ORIFICE BLANK, 1/2 MNPTX A 1/2 FNPT | 2   |
| 8    | 31-10517-04 | 61-061-014  | 4 X 30 HYD CYLINDER, ( -2013)       | (2) |
|      | -           | 61-061-027  | 4 X 30 HYD CYLINDER, (2014- )       | 2   |
| 9    | 31-10520-01 | 61-061-015  | 3.5 X 12 STROKE CYLINDER ( -2013)   | (1) |
|      | -           | 61-061-023  | 3.5 X 12 STROKE CYLINDER (2014- )   | 1   |
| 10   | 31-10517-03 | 61-061-011  | 3. X 12 STROKE CYLINDER ( -2013)    | (2) |
|      | -           | 61-061-025  | 3. X 12 STROKE CYLINDER (2014- )    | 2   |
| 11   | 05-51021-01 | 61-059-003  | HOSE, 3/8 X 211, 1/2 MNPTF-6JICX    | 4   |
| 12   | 05-51021-09 | 61-059-011  | HOSE, 3/8 X 177, 6FJICX-6FJICX      | 1   |
| 13   | 05-51021-10 | 61-059-012  | HOSE, 3/8 X 139, 6FJICX-6FJICX      | 1   |
| 14   | 05-51021-12 | 61-059-014  | HOSE, 3/8 X 151, 6FJICX-1/2 MNPT    | 1   |
| 15   | 05-51021-11 | 61-059-013  | HOSE, 3/8 X 93, 6FJICX-1/2 MNPT     | 1   |
| 16   | 05-51021-06 | 61-059-008  | HOSE, 3/8 X 24, 6FJICX-6FJICX       | 1   |
| 17   | 05-51021-08 | 61-059-010  | HOSE, 3/8 X 152, 6FJICX-6FJICX      | 1   |
| 18   | 05-51021-07 | 61-059-009  | HOSE, 3/8 X 165, 6FJICX-6FJICX      | 1   |
| 19   | 31-10543-01 | 61-061-016  | SEQU. RV2-10-S-8T-35                | 1   |
| 20   | -           | 33-059-123  | ADAPTER, 8MB-8MB-90                 | 1   |
| 21   | -           | 33-061-149  | BALL VALVE, TANK CYL                | 1   |
| 22   | 05-51021-02 | 61-059-004  | HOSE, 3/8 X 241, 6FJICX-6FJICX      | 1   |
| 23   | 05-51021-04 | 61-059-006  | HOSE, 3/8 X 195, 6FJICX-6FJICX      | 1   |
| 24   | 05-51021-03 | 61-059-005  | HOSE, 3/8 X 226, 6FJICX-6FJICX      | 1   |
| 25   | 05-51021-05 | 61-059-007  | HOSE, 3/8 X 183, 6FJICX-6FJICX      | 1   |

**TAIL HYDRAULIC CYLINDER (3 1/2" BORE X 12" STROKE)**

(PMF # 31-10520-01) (KMC # 61-061-015)

(PRIOR TO 2014)



| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | -           | 07-061-045  | LOCKNUT, 1 1/8-12 G"C"       | 1   |
| 2    | -           | 33-056-039  | PSP PISTON SEAL, 3.5B        | 1   |
| 3    | -           | 07-061-047  | ORING, 1.00 X 1.125          | 1   |
| 4    | -           | 07-061-046  | PISTON, 3.5 DIA              | 1   |
| 5    | -           | 61-061-007  | CYL BODY, 3.5                | 1   |
| 6    | -           | 61-061-008  | ROD CYL 1.5 X 18.625         | 1   |
| 7    | -           | 61-061-009  | GUIDE 3.5 - 1.5              | 1   |
| 8    | -           | 33-056-023  | ORING NT, 3.25 X 3.50        | 1   |
| 9    | -           | 33-061-055  | BACKUP RING 3.25 X 3.50      | 1   |
| 10   | -           | 48-061-011  | RET RING RD INT, 3.5         | 1   |
| 11   | -           | 48-061-013  | SPANNER NUT, .375 X 4.00     | 1   |
| 12   | -           | 61-061-005  | UCUP LIP 1.50 X 1.875 X .312 | 1   |
| 13   | -           | 23-061-038  | WIPER RING, 1.5              | 1   |
| 14   | -           | 33-061-036  | BALL NYLON, .25 G2           | 1   |
| 15   | -           | 54-020010   | SETSCREW, 3/8-16 X .375      | 1   |
| 16   | -           | 16-061-048  | ROD CLEVIS, 1.5-12           | 1   |
| 17   | -           | 61-061-006  | SEAL KIT, 3.5 X 12 CYINDER   | -   |

**3 1/2 X 12 HYDRAULIC CYLINDER (BAILEY)**

(61-061-023) (Tail Hydraulic Cylinder)

(Used on Machines From 2014 to Present)

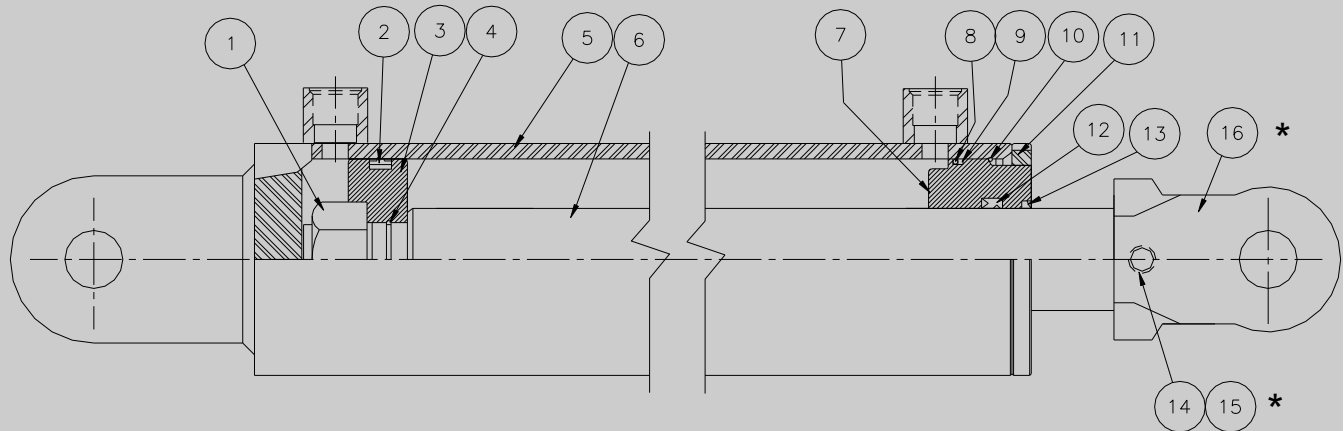
Bailey's Hydraulic Cylinder (61-061-023) will replace  
Energy's Hydraulic Cylinder (61-061-015).  
Bailey will not sale any repair parts except for a Seal Kit.

**USE SEAL KIT # 61-061-024**

**WING HYDRAULIC CYLINDER (4" BORE X 30" STROKE)**

(PMF # 31-10517-04) (KMC # 61-061-014)

(PRIOR TO 2014)



| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | -           | 23-061-004  | NUT LOCK, T 1/4-12 G" C"     | 1   |
| 2    | -           | 21-061-074  | PSP PISTON SEAL, 4" B        | 1   |
| 3    | -           | 59-061-008  | PISTON, 4"                   | 1   |
| 4    | -           | 16-061-042  | O-RING, 1.125 X 1.250        | 1   |
| 5    | -           | 61-061-012  | CYL BODY, 4.00 ID            | 1   |
| 6    | -           | 61-061-013  | ROD CP 2 X 35.375            | 1   |
| 7    | -           | 59-061-011  | GUIDE, 4 OD - 2 ID           | 1   |
| 8    | -           | 21-061-065  | ORING, 3.75 X 4.00           | 1   |
| 9    | -           | 21-061-068  | BACKUP RING, 3.75 X 4.00     | 1   |
| 10   | -           | 48-061-022  | RET RING RD INT, 4           | 1   |
| 11   | -           | 48-061-023  | SPANNER NUT, .375 X 4.5      | 1   |
| 12   | -           | 59-061-012  | U-CUP LIP 2 X 2.375 X .312   | 1   |
| 13   | -           | 16-061-045  | WIPER RING, 2                | 1   |
| *14  | -           | 54-020010   | SETSCREW, 3/8-16 X .375      | 1   |
| *15  | -           | 33-061-036  | BALL NYLON, .250             | 1   |
| *16  | -           | 08-061-019  | ROD CLEVIS, 1.25 - 12 UNF    | 1   |
| 17   | -           | 59-061-007  | SEAL KIT, 4.00 BORE—2.00 ROD | -   |

\* THESE PARTS NOT INCLUDED IN CYLINDER (61-061-014)

**4 X 30 HYDRAULIC CYLINDER (BAILEY)**

(61-061-027) (Wing Hydraulic Cylinder)

(Used on Machines From 2014 to Present)

Bailey's Hydraulic Cylinder (61-061-027) will replace

Energy's Hydraulic Cylinder (61-061-014).

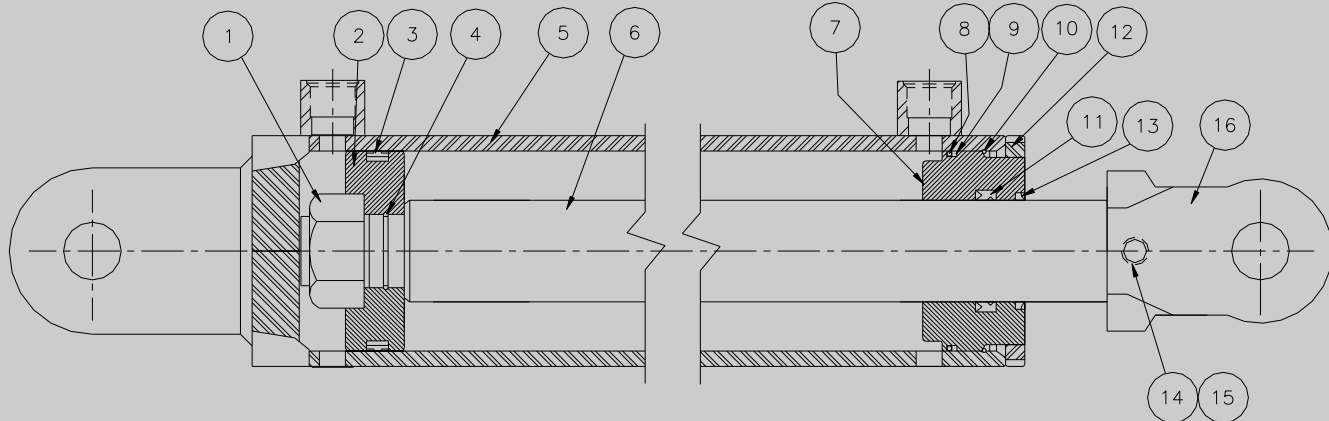
Bailey will not sale any repair parts except for a Seal Kit.

**USE SEAL KIT # 61-061-028**

**FLIP-OVER HYDRAULIC CYLINDER (3" BORE X 12" STROKE)**

(PMF # 31-10517-03) (KMC # 61-061-011)

(PRIOR TO 2014)



| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                  | QTY |
|------|-------------|-------------|------------------------------|-----|
| 1    | -           | 33-061-056  | LOCKNUT, 1-14 G"C"           | 1   |
| 2    | -           | 08-061-014  | PISTON, 3"B                  | 1   |
| 3    | -           | 08-061-004  | PSP PISTON SEAL, 3B          | 1   |
| 4    | -           | 33-056-021  | ORING, .875 X 1.0            | 1   |
| 5    | -           | 61-061-002  | CYL BODY, 3.00               | 1   |
| 6    | -           | 61-061-003  | ROD CP 1.5 X 18              | 1   |
| 7    | -           | 61-061-004  | GUIDE, 3B - 1.5 ID           | 1   |
| 8    | -           | 42-061-182  | ORING NT, 2.812 X 3.00       | 1   |
| 9    | -           | 42-061-183  | BACKUP RING 2.812 X 3.00     | 1   |
| 10   | -           | 42-061-184  | RET RING RD INT, 3.000       | 1   |
| 11   | -           | 61-061-005  | UCUP LIP, 1.5 X 1.875 X .312 | 1   |
| 12   | -           | 42-061-185  | SPANNER NUT, .375 X 3.437    | 1   |
| 13   | -           | 23-061-038  | WIPER RING, 1.5              | 1   |
| 14   | -           | 33-061-036  | BALL NYLON, .250 G2          | 1   |
| 15   | -           | 54-020010   | SETSCREW, 3/8-16 X .375      | 1   |
| 16   | -           | 16-061-048  | ROD CLEVIS 1.5-12            | 1   |
| 17   | -           | 61-061-001  | SEAL KIT, 3.00 - 1.50        | -   |

**4 X 30 HYDRAULIC CYLINDER (BAILEY)**

(61-061-025) (Flip-Over Hydraulic Cylinder)

(Used on Machines From 2014 to Present)

Bailey's Hydraulic Cylinder (61-061-025) will replace  
Energy's Hydraulic Cylinder (61-061-011).  
Bailey will not sale any repair parts except for a Seal Kit.

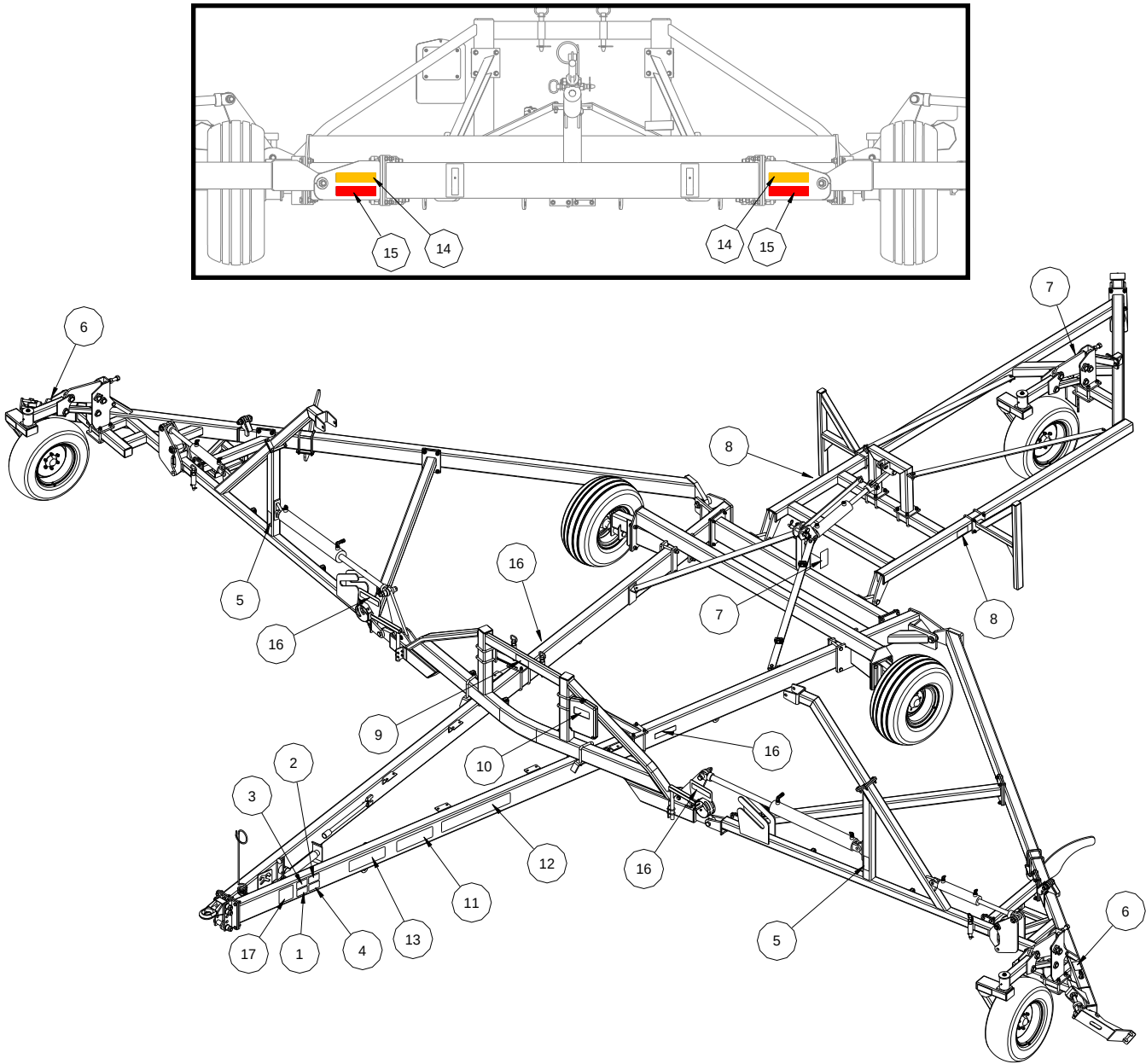
**USE SEAL KIT # 61-061-026**



BLANK  
PAGE

# MISCELLANEOUS COMPONENTS

## DECAL SCHEMATIC

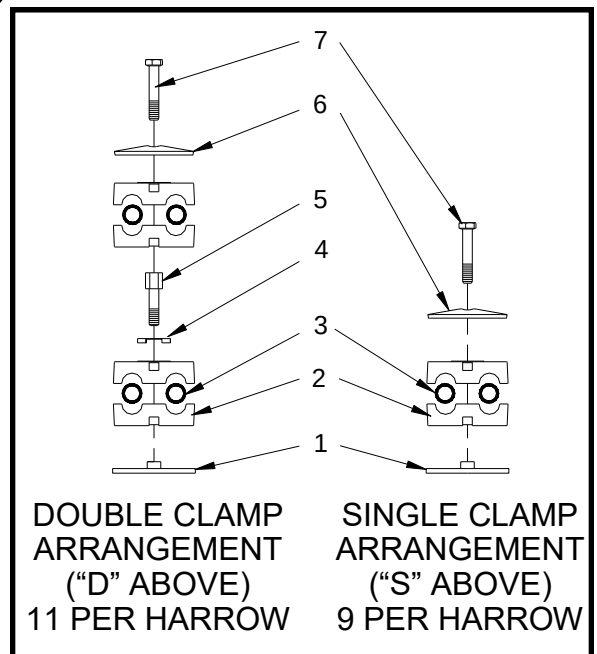
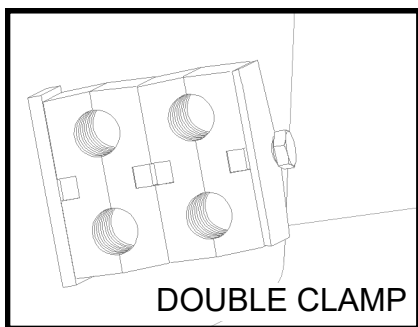
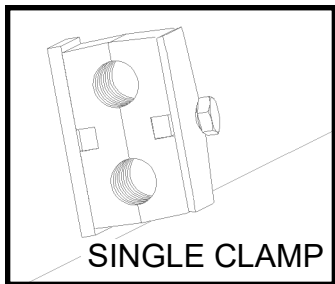
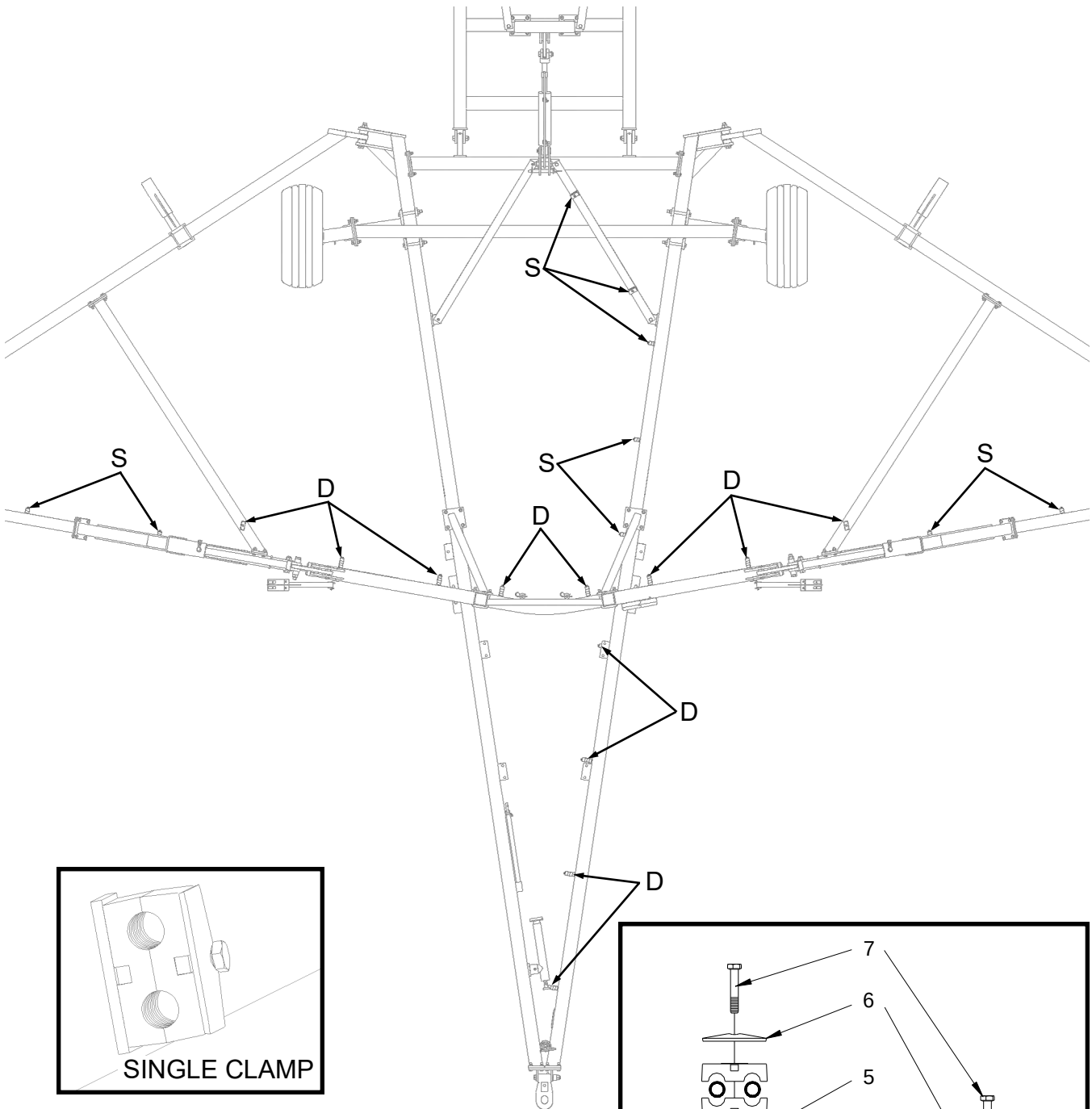


| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                   | QTY |
|------|-------------|-------------|-------------------------------|-----|
| 1    |             |             |                               |     |
| 2    |             |             |                               |     |
| 3    | 31-11130-10 | 61-050-050  | DECAL, ELECTROCUTION HAZARD   | 1   |
| 4    | 31-11130-17 | 61-050-051  | DECAL, DO NOT RAISE IN MOTION | 1   |
| 5    | 31-11130-01 | 61-050-043  | DECAL, FALLING WING HAZARD    | 2   |
| 6    | 31-11130-08 | 61-050-049  | DECAL, ATTENTION TOOL TENSION | 2   |

## 45' ROTARY HARROW

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                     | QTY |
|------|-------------|-------------|---------------------------------|-----|
| 7    | 31-11130-05 | 61-050-046  | DECAL, TAIL TRANSPORT LOCK      | 2   |
| 8    | 31-11130-02 | 61-050-044  | DECAL, FALLING TAIL HAZARD      | 2   |
| 9    | 31-11130-04 | 61-050-045  | DECAL, ATTENTION TRANSPORT LOCK | 1   |
| 10   | 31-11148-00 | 61-050-052  | DECAL, READ MANUAL INSTRUCTIONS | 1   |
| 11   | -           | 61-050-001  | DECAL, 4505                     | 2   |
| 12   | 31-11106-01 | 61-050-040  | DECAL, PHILLIPS HARROW DECAL    | 2   |
| 13   | -           | 16-050-035  | DECAL, KMC 4 X 14               | 2   |
| 14   | 31-11129-01 | 33-050-267  | DECAL, ORANBE VISIBILITY        | 2   |
| 15   | 31-11111-01 | 33-050-266  | DECAL, RED REFLECTIVE           | 2   |
| 16   | 31-11110-01 | 33-050-265  | DECAL, YELLOW REFLECTIVE        | 4   |
| 17   | 31-11130-07 | 61-050-048  | DECAL, CORRECT HYD. ACTIVATION  | 1   |
| 18   | -           | 61-050-008  | DECAL, 45' TIRE PRESSURE        | 1   |

# HOSE CLAMP SCHEMATIC



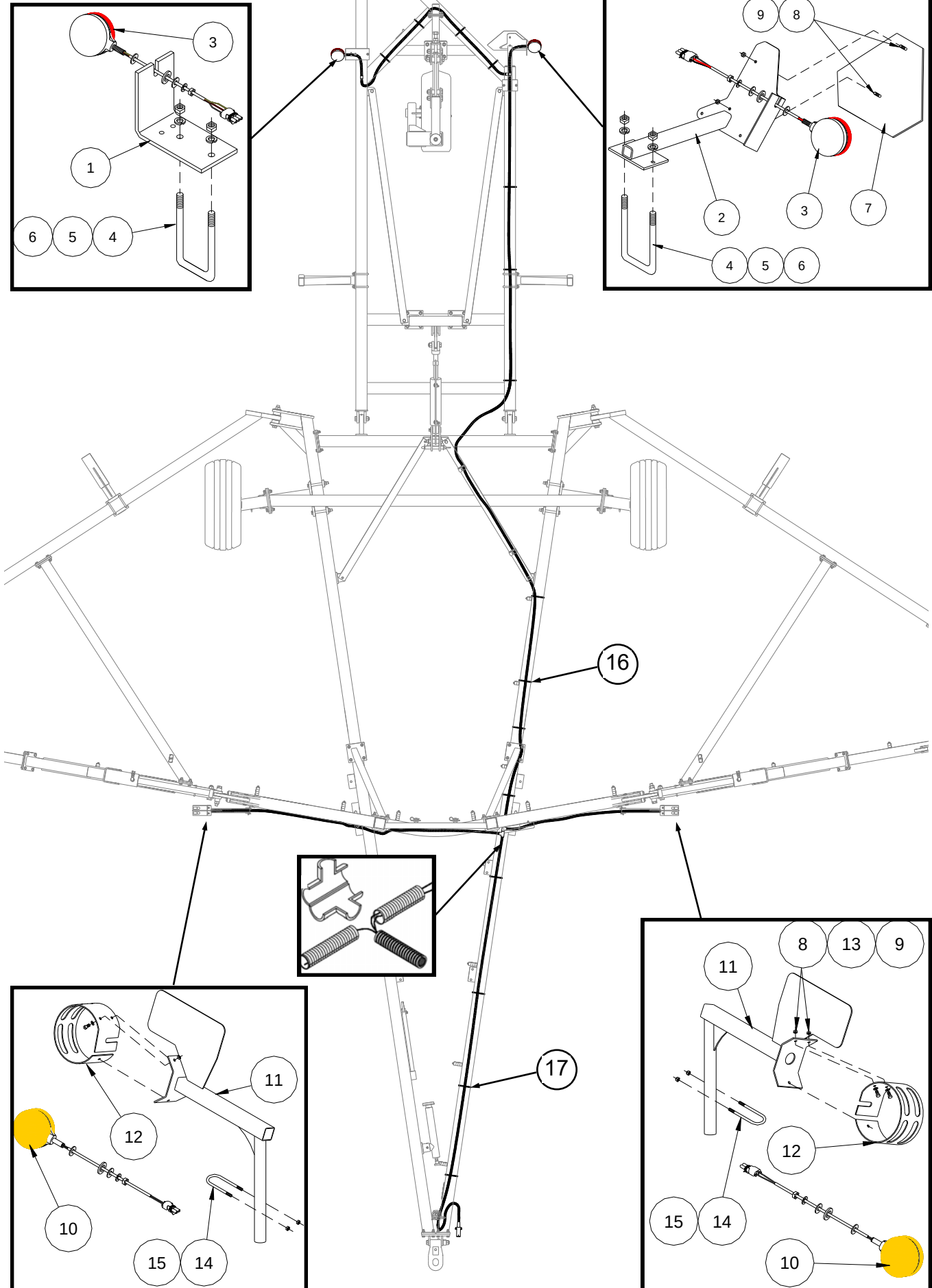
**SINGLE HOSE CLAMP ASSEMBLY**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                   | QTY |
|------|-------------|-------------|-------------------------------|-----|
| 1    | 30-90550-06 | 48-050-022  | WELD PLATE, #3                | 1   |
| 2    | 30-90550-03 | 33-050-158  | CLAMP, HOSE                   | 1   |
| 3    | N/A         | -           | HOSE LOCATION                 | -   |
| 6    | 30-90550-07 | 33-050-160  | COVER PLATE                   | 1   |
| 7    | 31-50131-08 | 48-090033   | CAPSCREW, 5/16 X 1-3/4 G5 PLT | 1   |

**DOUBLE HOSE CLAMP ASSEMBLY**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                   | QTY |
|------|-------------|-------------|-------------------------------|-----|
| 1    | 30-90550-06 | 48-050-022  | WELD PLATE, #3                | 1   |
| 2    | 30-90550-03 | 33-050-158  | CLAMP, HOSE                   | 2   |
| 3    | N/A         | -           | HOSE LOCATION                 | -   |
| 4    | 30-90550-05 | 61-050-022  | HYCON SAFETY PLATE            | 1   |
| 5    | 30-90550-04 | 61-050-021  | HYCON STACKING BOLT           | 1   |
| 6    | 30-90550-07 | 33-050-160  | COVER PLATE                   | 1   |
| 7    | 31-50131-08 | 48-090-033  | CAPSCREW, 5/16 X 1-3/4 G5 PLT | 1   |

# 45' ROTARY HARROW



**LIGHTING SCHEMATIC**

| ITEM | PMF PART NO | KMC PART NO | DESCRIPTION                         | QTY |
|------|-------------|-------------|-------------------------------------|-----|
| 1    | 30-90376-40 | 61-027-085  | RIGHT TAIL MOUNT                    | 1   |
| 2    | 05-51066-01 | 61-080-064  | TAIL LIGHT SMV SIGN                 | 1   |
| 3    | 05-51064-01 | 61-062-001  | RED TAIL LIGHT ASSEMBLY             | 2   |
| 4    | 31-10946-21 | 20-080-008  | U-BOLT, 3/8 X 4 3/4 X 4 7/16        | 4   |
| 5    | 31-50338-01 | 66-010150   | LOCKWASHER, 3/8 PLT                 | 8   |
| 6    | 31-50238-01 | 68-010150   | HEX NUT, 3/8 PLT                    | 8   |
| 7    | 31-11400-01 | 03-050-068  | EMBLEM, S.M.V.                      | 1   |
| 8    | -           | 48-110000   | CAPSCREW, 1/4 X 3/4 G8 PLT          | 8   |
| 9    | -           | 72-010055   | LOCKNUT, 1/4 NYLON INSERT           | 8   |
| 10   | 07-10058-00 | 61-062-004  | LAMP AND WIRE ASSY                  | 2   |
| 11   | 05-51072-01 | 61-080-067  | EXTREME LIGHT BRACKET, HARROW       | 2   |
| 12   | 07-10068-00 | 61-027-089  | EXTREMITY LIGHT SHIELD              | 2   |
| 13   | -           | 62-010010   | FLATWASHER,                         | 6   |
| 14   | 31-10945-02 | 61-050-025  | U-BOLT, 5-16 X 1.69 X 2.19          | 4   |
| 15   | 31-50231-02 | 72-010025   | LOCKNUT, 5/16 STOVER G"B"           | 8   |
| 16   | 05-51065-02 | 61-062-002  | LOCKNUT, 5/8 X 2 NC STOVER GD C PLT | 1   |
| 17   | 31-10958-02 | 02-050-088  | HD TIE WRAP 21 15/32" BLACK         | 20  |

BLANK  
PAGE



The following is a list of serial numbers issued to our machines at the beginning of each year. To determine when a unit was made, find the range within which the particular serial number falls. It would have been produced between January 1 to December 31 of that year.

| <b>YEAR</b> | <b>SERIAL NUMBERS</b> |
|-------------|-----------------------|
| 2007        | 76369-77883           |
| 2008        | 77884-79891           |
| 2009        | 79892-80944           |
| 2010        | 80945-81775           |
| 2011        | 81776-83453           |
| 2012        | 83454-85092           |
| 2013        | 85093-86418           |
| 2014        | 86419-87790           |
| 2015        | 87791-89096           |
| 2016        | 89097-90089           |
| 2017        | 90090-                |



## **DEPENDABLE EQUIPMENT FOR PROGRESSIVE FARMING**

*Visit us at [www.kelleymfg.com](http://www.kelleymfg.com)*



## **KELLEY MANUFACTURING CO.**

80 Vernon Drive / Zip 31794  
P.O. Drawer 1467 / Zip 31793  
Tifton, GA



Tel: 229-382-9393  
Toll Free: 1-800-444-5449  
Fax: 229-382-5259

Email Address: [info@kelleymfg.com](mailto:info@kelleymfg.com)