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**2010 MODEL 699 40FT DISC CULTIVATOR  
ASSEMBLY AND PARTS MANUAL**



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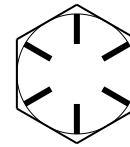
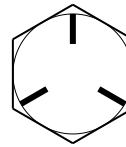
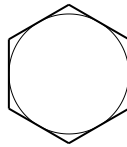
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## Salford Recommended Torque Values



| BOLT SIZE | GRADE 2 |     | GRADE 5 |     | GRADE 8 |      |
|-----------|---------|-----|---------|-----|---------|------|
|           | ft-lbs  | Nm  | ft-lbs  | Nm  | ft-lbs  | Nm   |
| 1/2"NC    | 50      | 68  | 75      | 102 | 105     | 142  |
| 5/8"NC    | 90      | 122 | 150     | 203 | 210     | 285  |
| 3/4"NC    | 160     | 217 | 270     | 366 | 375     | 508  |
| 7/8"NC    | 145     | 197 | 395     | 536 | 610     | 827  |
| 1"NC      | 210     | 285 | 590     | 800 | 910     | 1234 |

**NOTES:** These recommended torque values are applicable when applied to the nut only. These recommended torque values are approximate only. The torque-tension relationship is affected by lubrication, surface finish, thread fit, plating, lock-washers, etc.

**DO NOT** use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

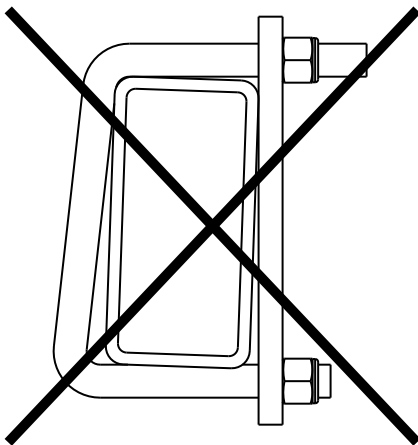
Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

Fasteners should be replaced with the same or higher grade. If higher-grade fasteners are used, these should only be tightened to the strength of the original.

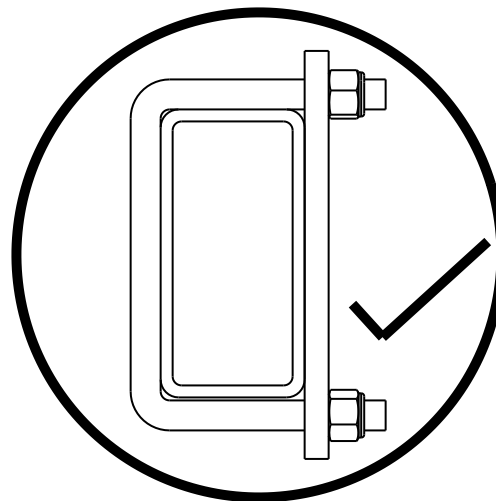
Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

### WARNING

Do not tighten one side of the u-bolt before the other side.



Both sides of the u-bolt must be tightened equally.



## General Safety Precautions

### Signal Words

The words **DANGER**, **WARNING** or **CAUTION** are used with the safety alert symbol. Learn to recognize the safety alerts, and follow the recommended precautions and safe practices.

**Three words are used in conjunction with the safety-alert symbol:**



### **DANGER**

Indicates an imminently hazardous situation that, if not avoided, will cause **DEATH OR VERY SERIOUS INJURY**.



### **WARNING**

Indicates a potentially hazardous situation that, if not avoided, could cause **DEATH OR SERIOUS INJURY**.



### **CAUTION**

Indicates a potentially hazardous situation that, if not avoided, may result in **MINOR or MODERATE INJURY**.

Replace any **DANGER**, **WARNING**, **CAUTION** or instructional decal that is not readable or is missing. The location and part number of these decals is identified later in this section of the manual.

The words **Important** and **Note** are not related to personal safety but are used to give additional information and tips for operating or servicing this equipment.

**IMPORTANT:** Identifies special instructions or procedures which, if not strictly observed could result in damage to, or destruction of the machine, process or its surroundings.

**NOTE:** Indicates points of particular interest for more efficient and convenient repair or operation.

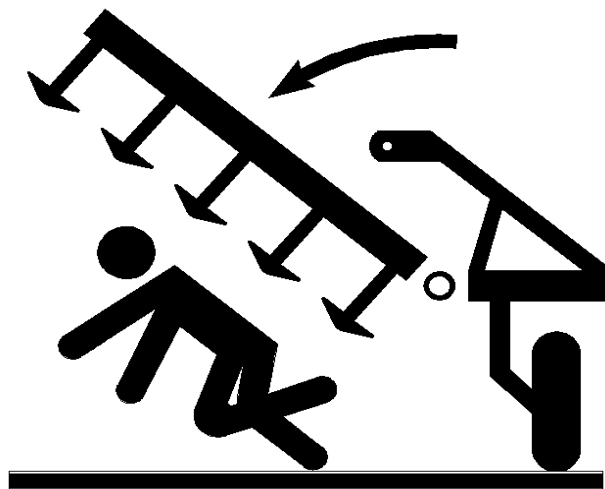
**A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT !**

## General Safety Precautions



**DANGER**

- Wings may fall rapidly causing injury.
- Always stay clear of wings when being lowered, raised or in a elevated state.
- Always use lockup device provided when raised.
- Ensure cylinder is completely filled with hydraulic fluid to avoid unexpected movement.

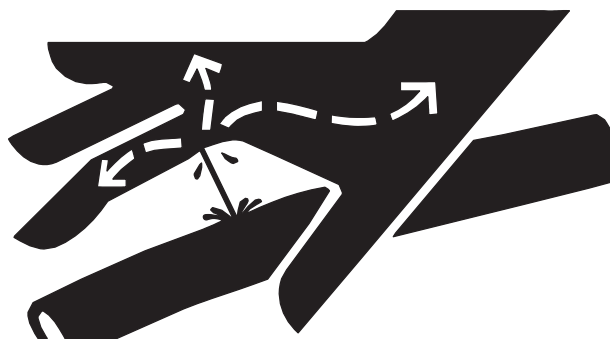


### Hydraulics



**DANGER**

- **DO NOT** search for high pressure hydraulic leaks without hand and face protection. A tiny, almost invisible leak can penetrate skin, thereby requiring immediate medical attention.
- Use cardboard or wood to detect leaks – never your hands.
- Double check that all is clear before operating hydraulics.
- **Never** remove hydraulic hoses or ends with machine elevated. Relieve hydraulic pressure before disconnecting hydraulic hoses or ends.
- Maintain proper hydraulic fluid levels.
- Keep all connectors clean for positive connections.
- Ensure all fittings and hoses are in good condition.
- Do not stand under wings.



## Torque Values for Tires



**WARNING** Maintain proper torque to provide safe and secure attachment of the wheel hub/drum. Improperly tightened wheel nuts can cause the wheel to separate from the wheel mounting surface during operation. This could result in property damage, serious personal injury, or possibly loss of life.

**NOTE** - If wheel does not have chamfers to match profile of the nuts, use flat side of nuts against rim face.

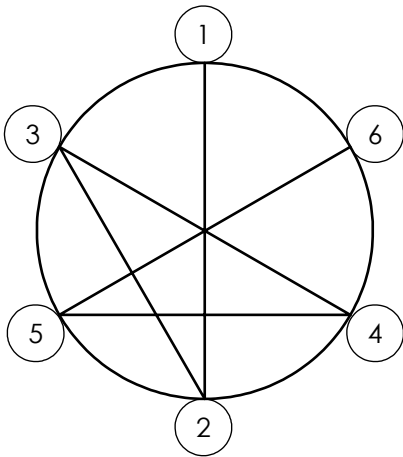
Install all lug nuts/bolts by hand to prevent cross threading and tighten lug nuts/bolts following the steps and tightening sequence diagram below.

- STEP 1) Torque to 20-25 ft•lbs following the appropriate pattern below.  
 STEP 2) Torque to 55-60 ft•lbs following the appropriate pattern below.  
 STEP 3) Torque to final ft•lbs rating (see bolt size below) following the appropriate pattern below.

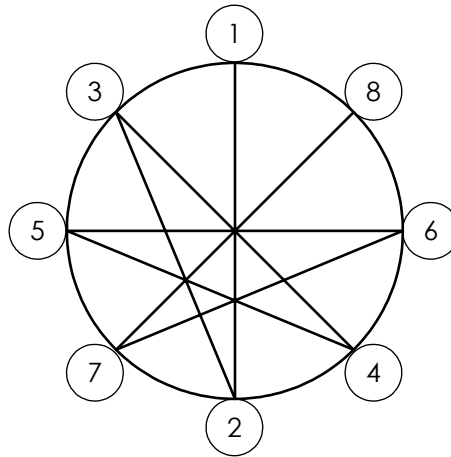
| Bolt Size (Hub Size)                   | Final Torque   |
|----------------------------------------|----------------|
| 1/2" dia. bolt (up to 3000 lb hubs)    | 85 ft•lbs      |
| 9/16" dia. bolt (4000 - 5000 lb hubs)  | 120 ft•lbs     |
| 5/8" dia. bolt (5500 - 12000 lb hubs)  | 170 ft•lbs     |
| 3/4" dia. bolt (16000 - 20000 lb hubs) | 300 ft•lbs     |
| 7/8" dia. bolt (25000 lb hubs)         | 450-500 ft•lbs |

## Lug Nut/Bolt Tightening Sequence

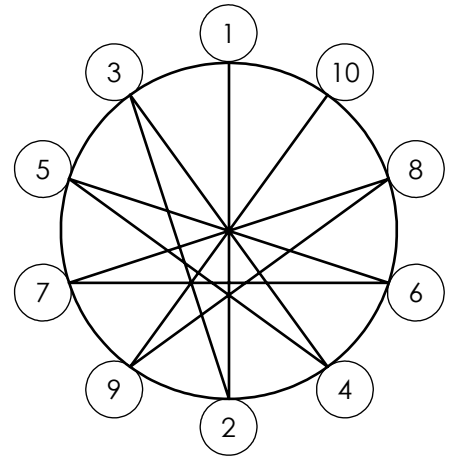
6 LUG BOLT PATTERN



8 LUG BOLT PATTERN



10 LUG BOLT PATTERN



**NOTE** - Recheck the torque settings of lug nuts/bolts after 10km (6 miles) and again after 50km (30 miles). Periodically and at the beginning of each season check the condition and the torque of the lug nuts/bolts.

## Pressure Values for Tires

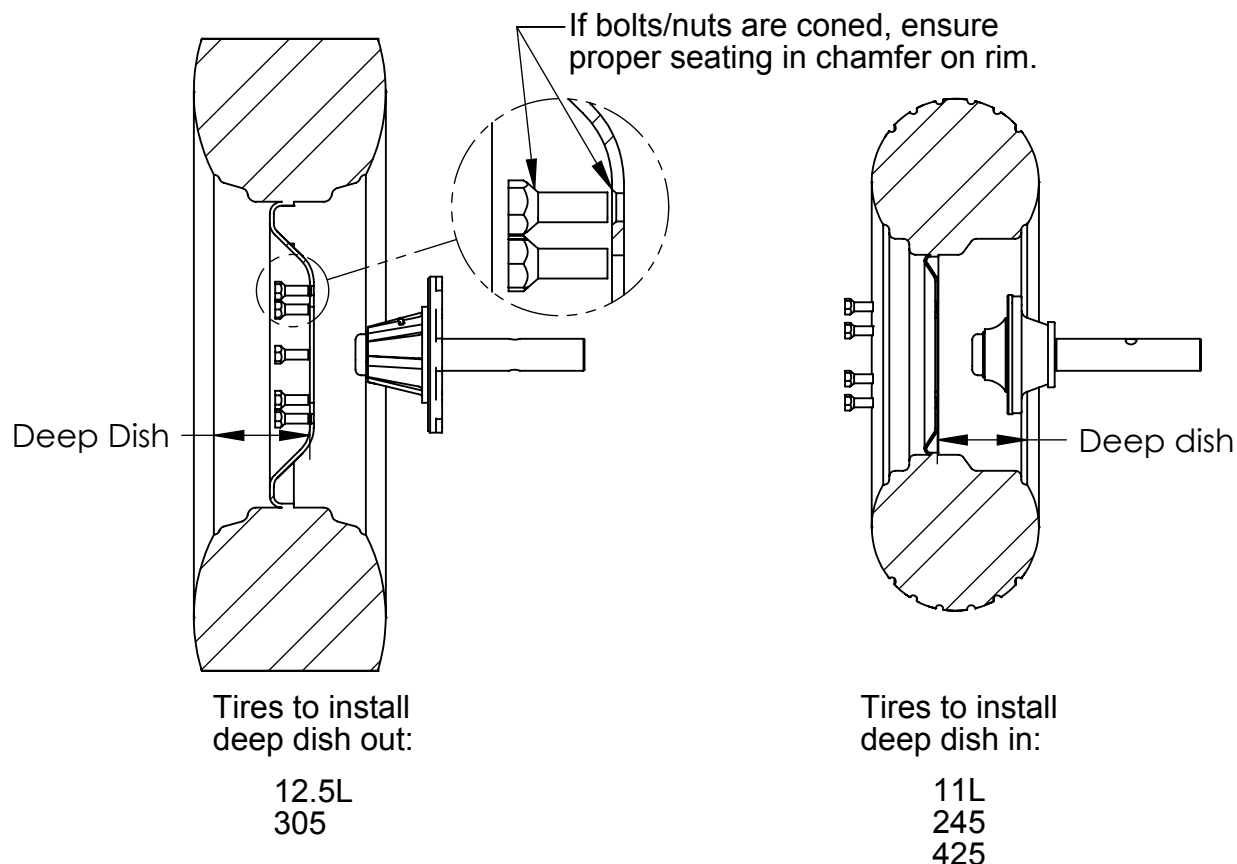
Ensure proper inflation of each tire for safe operation and extended tire life.

| Pressure [psi] | Pressure [bar] | Tire Size                                                                                        |
|----------------|----------------|--------------------------------------------------------------------------------------------------|
| 25 [psi]       | 1.72 [bar]     | 23.1 x 26 (16 ply)                                                                               |
| 35 [psi]       | 2.41 [bar]     | Load Range C - 11L15                                                                             |
| 36 [psi]       | 2.48 [bar]     | 28L26 (16 ply)                                                                                   |
| 52 [psi]       | 3.58 [bar]     | 30.5LR32 (181A8/B)                                                                               |
| 65 [psi]       | 4.48 [bar]     | Load Range D - 11L15<br>- 12.5L15                                                                |
| 90 [psi]       | 6.20 [bar]     | Load Range F - 11L15<br>- 12.5L15<br>Truck Tires - 245/70R19-5<br>- 305/70R22-5<br>- 425/60R22-5 |

**NOTE** - Periodically and at the beginning of each season check the condition and the pressure of each tire.

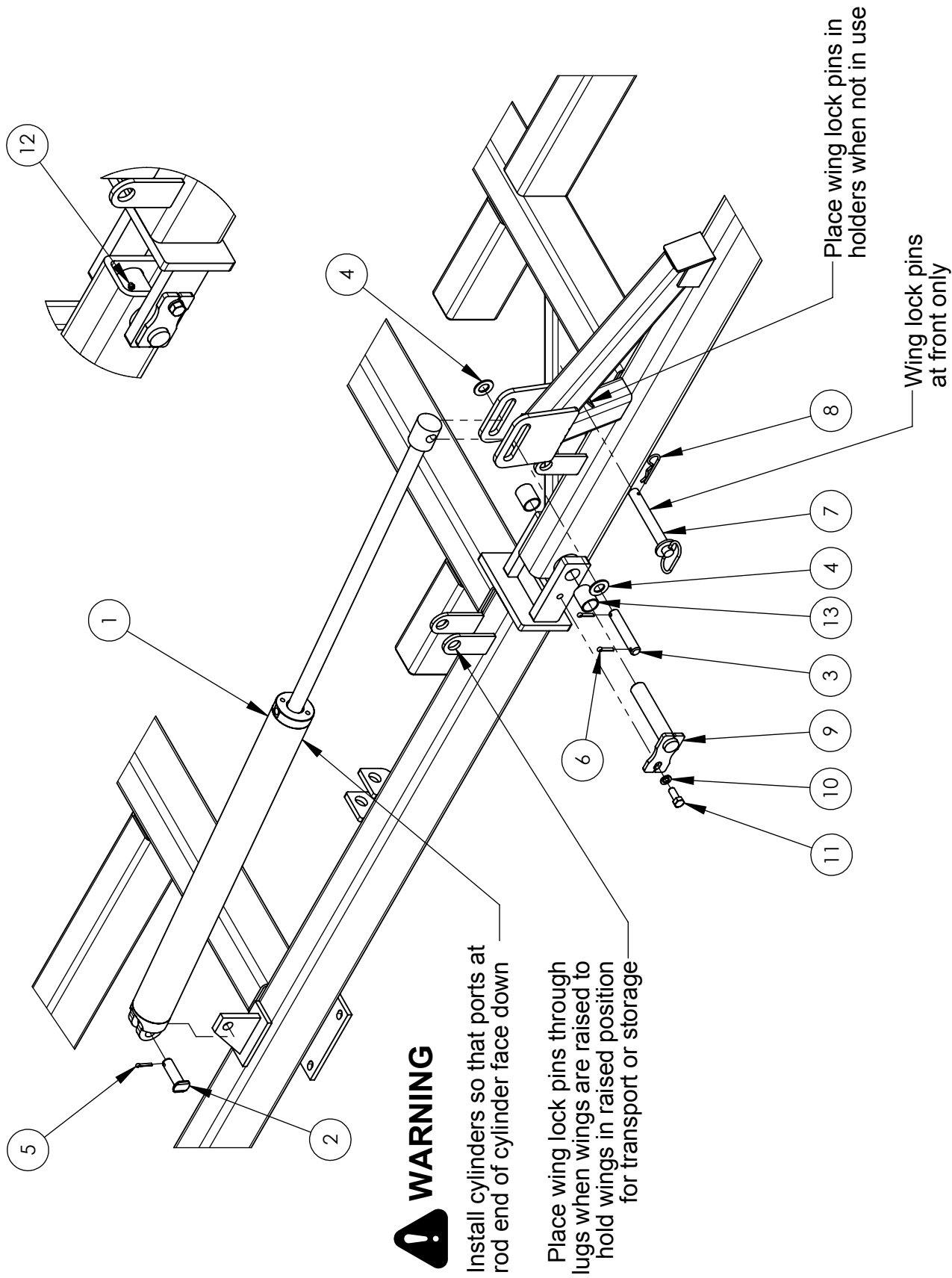
### Tire Installation Direction

Measure both sides of tire in to rim face. Install the deep side in or out according to the instructions below.



**Do not rely on valve stem for orientation of tires. It may face in or out on different rims.**

# Wing Installation



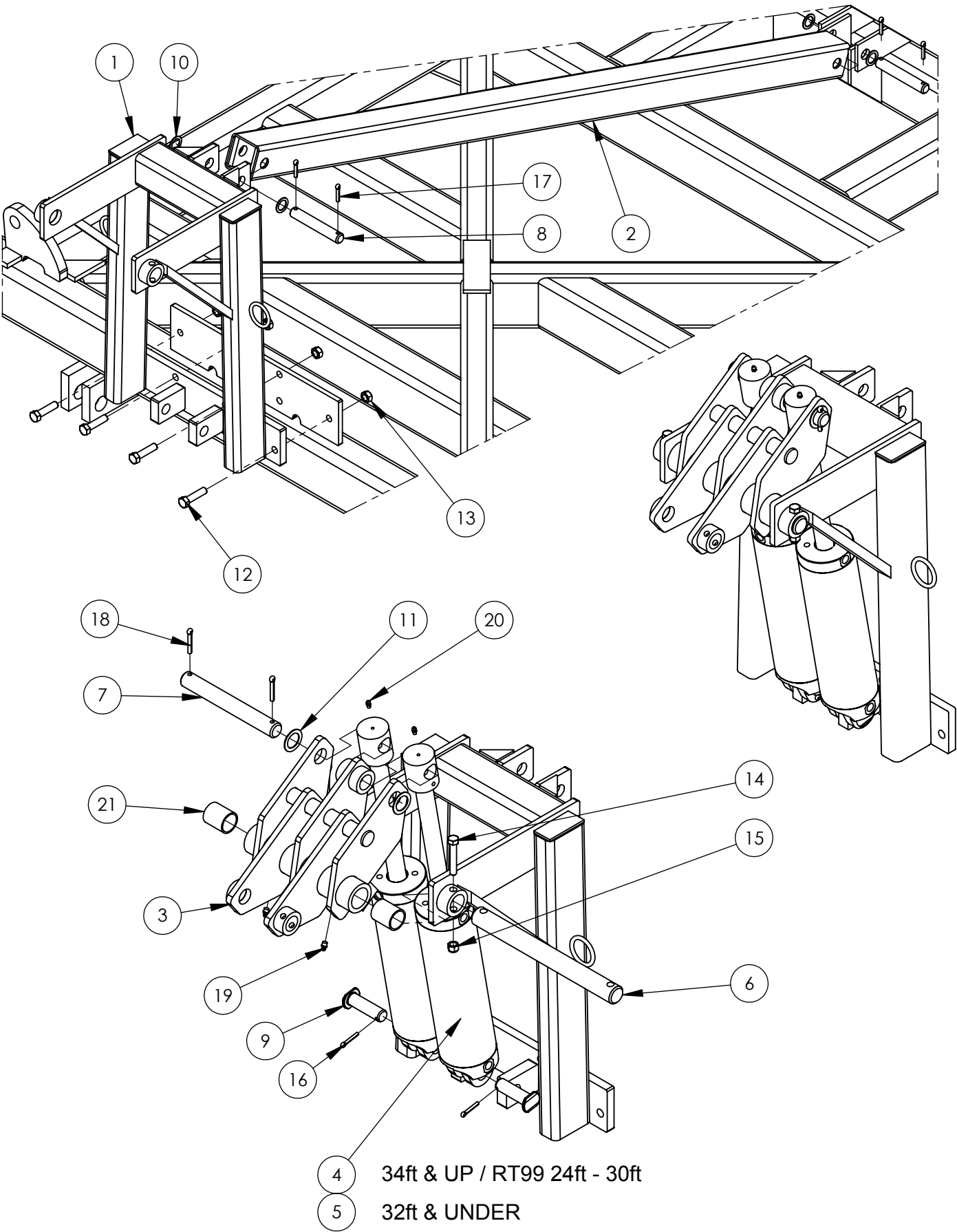
## Wing Installation

| ITEM | QTY | PART NO.       | DESCRIPTION                               |
|------|-----|----------------|-------------------------------------------|
| 1    | 4   | HS3536         | 3 1/2" BORE x 36" STROKE HYD. CYLINDER    |
| 2    | 4   | GPHF1600338H04 | 1" x 3 3/8" SHOULDER PIN HARDENED W/FLATS |
| 3    | 4   | GP1600512A05   | PIN 1" DIA. x 5 1/2" LG. - 2 HOLES        |
| 4    | 8   | BF16S          | 1" SAE WASHER                             |
| 5    | 4   | BSC0415        | 1/4" x 1 1/2" COTTER PIN                  |
| 6    | 8   | BSC0515        | 5/16" x 1 1/2" COTTER PIN                 |
| 7    | 2   | GP1600714C04   | 1" x 7 1/4" HITCH PIN                     |
| 8    | 2   | GHP6           | #6 HAIR PIN                               |
| 9    | 4   | GPH2400814F    | 1 1/2" x 8 1/4" LG. HARD PLATE PIN        |
| 10   | 4   | BL10           | 5/8" LOCKWASHER                           |
| 11   | 4   | B1015          | 5/8 X 1 1/2" PLATED BOLT                  |
| 12   | 4   | GF1610         | 1/8" NPT GREASE FITTING                   |
| 13   | 8   | GBB175150200   | 1 3/4" x 1 1/2" x 2" LG. HARD BUSHING     |



**DANGER** Connect hoses and charge the wing cylinders with fluid following the procedure in the wing fold hydraulics section of this manual before connecting rod ends of the cylinders.

# Self Leveling Tower Assembly



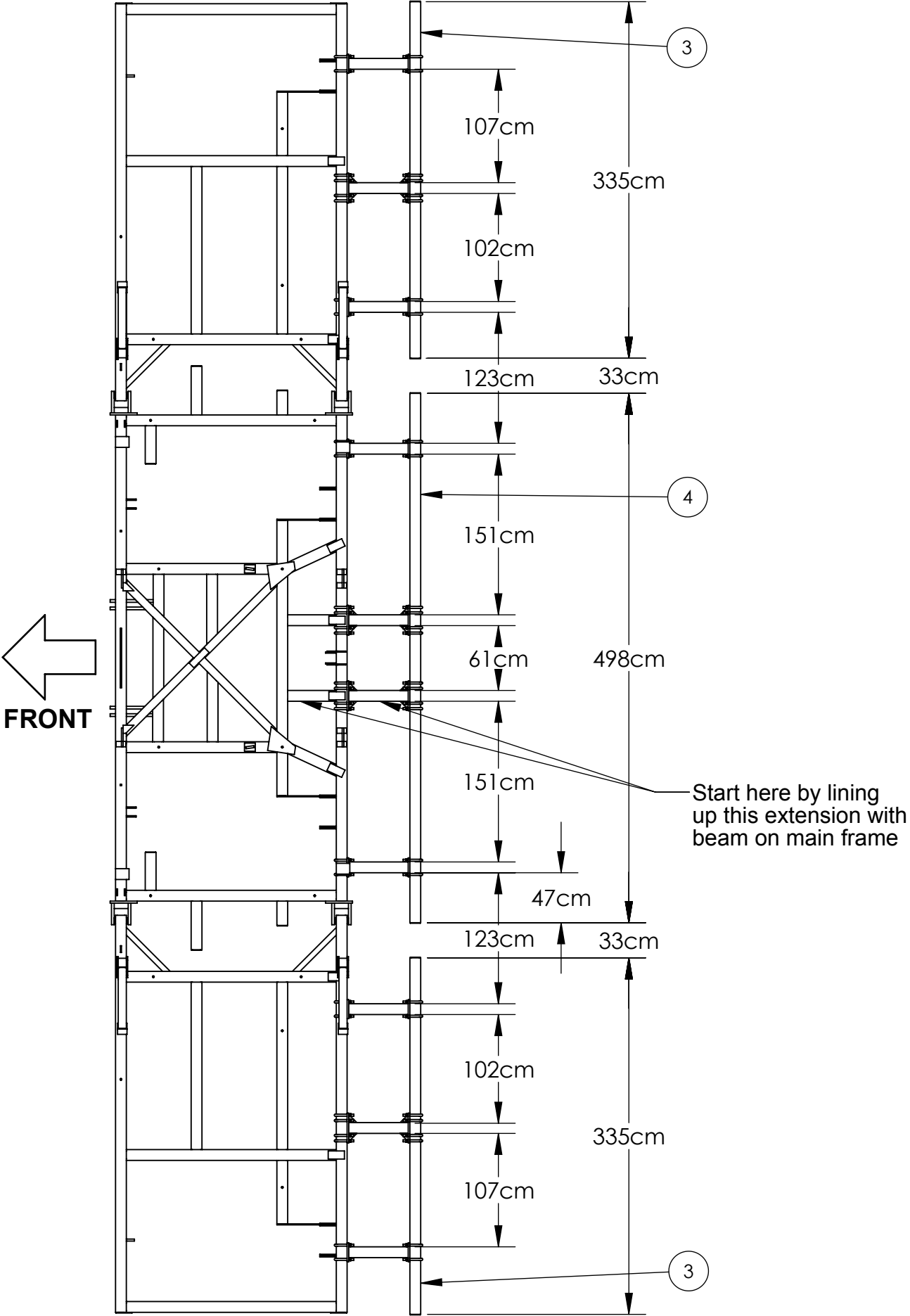
## Self Leveling Tower Assembly

| ITEM | QTY. | PART NO. | DESCRIPTION                                              |
|------|------|----------|----------------------------------------------------------|
| 1    | 1    | C10575   | 550/570/699/700 TRIPOD TOWER                             |
| 2    | 1    | C10668   | 570 TRIPOD BRACE                                         |
| 3    | 1    | C10990   | 699 SELF-LEVELING PIVOT                                  |
| +    | 4    | 2        | HSR40095 4" BORE x 9 1/2" STROKE HYD. CYLINDER           |
| ++   | 5    | 2        | HSR35095 3 1/2" BORE x 12" STROKE HYD. CYLINDER          |
|      | 6    | 1        | GP2401514A09 PIN 1 1/2" DIA. x 15 1/4" LG. - 2 HOLES     |
|      | 7    | 1        | GP20010A05 1 1/4" DIA. x 10 1/4" LG - 2 HOLE             |
|      | 8    | 2        | GP1600614A05 PIN 1" DIA. x 6 1/4" LG. - 2 HOLES          |
|      | 9    | 2        | GPHF1600338H04 1" x 3 3/8" SHOULDER PIN HARDENED W/FLATS |
|      | 10   | 4        | GM26 1" MACHINE BUSHING                                  |
|      | 11   | 2        | GM30 1 1/4" MACHINE BUSHING                              |
|      | 12   | 4        | B1025 5/8 X 2 1/2" GR.5 PLATED BOLT                      |
|      | 13   | 4        | BN10S 5/8" NC STOVER LOCK NUT                            |
|      | 14   | 2        | B0830 1/2"NC x 3" HEX BOLT                               |
|      | 15   | 2        | BN08L 1/2" NYLOCK NUT NC                                 |
|      | 16   | 2        | BSC0415 1/4" x 1 1/2" COTTER PIN                         |
|      | 17   | 4        | BSC0515 5/16" x 1 1/2" COTTER PIN                        |
|      | 18   | 2        | BSC0520 5/16" x 2" COTTER PIN                            |
|      | 19   | 2        | GF1610 1/8" NPT GREASE FITTING                           |
|      | 20   | 2        | GF641 1/4"-28NF GREASE FITTING                           |
|      | 21   | 2        | GBB175150200 1 3/4" x 1 1/2" x 2" LG. HARD BUSHING       |

+ USE FOR 34ft & UP / RT99 24ft - 30ft

++ USE FOR 32ft & UNDER

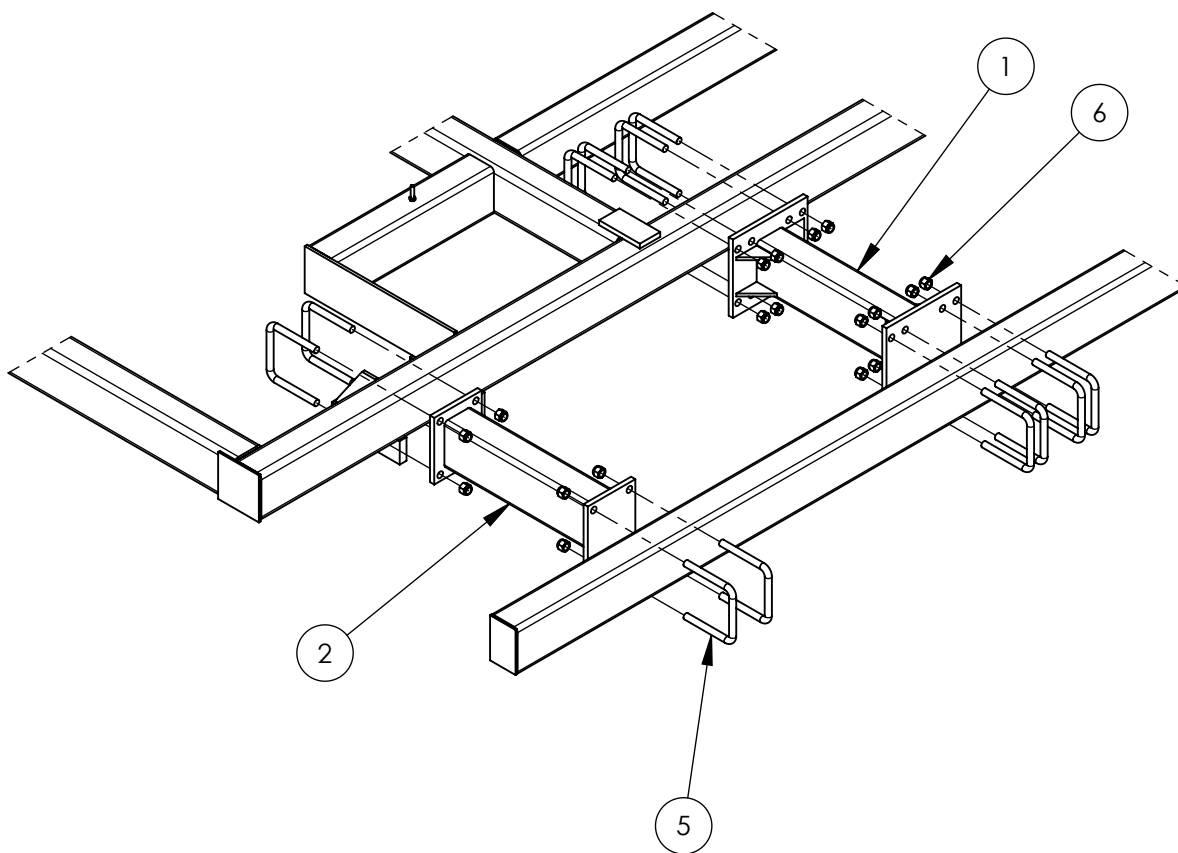
# Rear 6th Bar Layout



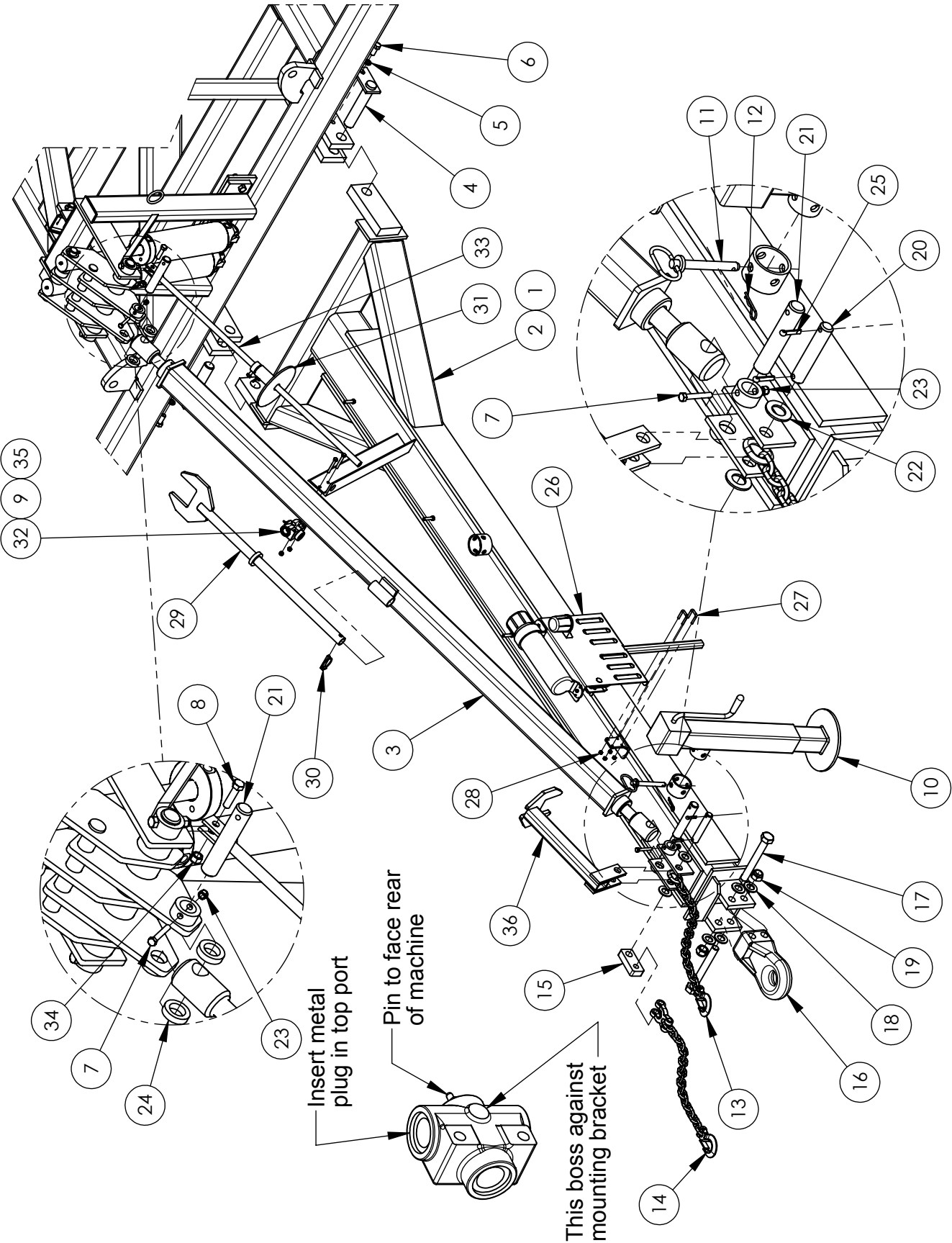
## Rear 6th Bar Installation

| ITEM NO. | QTY. | PART NO.   | DESCRIPTION                            |
|----------|------|------------|----------------------------------------|
| 1        | 4    | C10782     | 23" DOUBLE 3/4" U-BOLT EXTENSION       |
| 2        | 6    | C10783     | 23" SINGLE 3/4" U-BOLT EXTENSION       |
| 3        | 2    | UC40604132 | CAPPED TUBE 4" x 6" x 1/4"W x 132" LG. |
| 4        | 1    | UC40604196 | CAPPED TUBE 4" x 6" x 1/4"W x 196" LG. |
| 5        | 56   | BU1260     | 3/4" x 6 x 6 1/2" U-BOLT               |
| 6        | 112  | BN12L      | 3/4" NC NYLOCK NUT                     |

1. Mount 23" extensions (1 & 2) to rear of main frame at positions shown in layout. Retain with 3/4" x 6" x 6 1/2" u-bolts (5) and 3/4" lock nuts (6). Do not tighten bolts yet.
2. Mount 5th bar tubes (3 & 4) to extensions with 3/4" x 6" x 6 1/2" u-bolts (5) and 3/4" lock nuts (6). Do not tighten bolts yet.
3. Verify locations of extensions and 5th bars, then tighten all bolts.



# Tongue Installation



## Tongue Installation

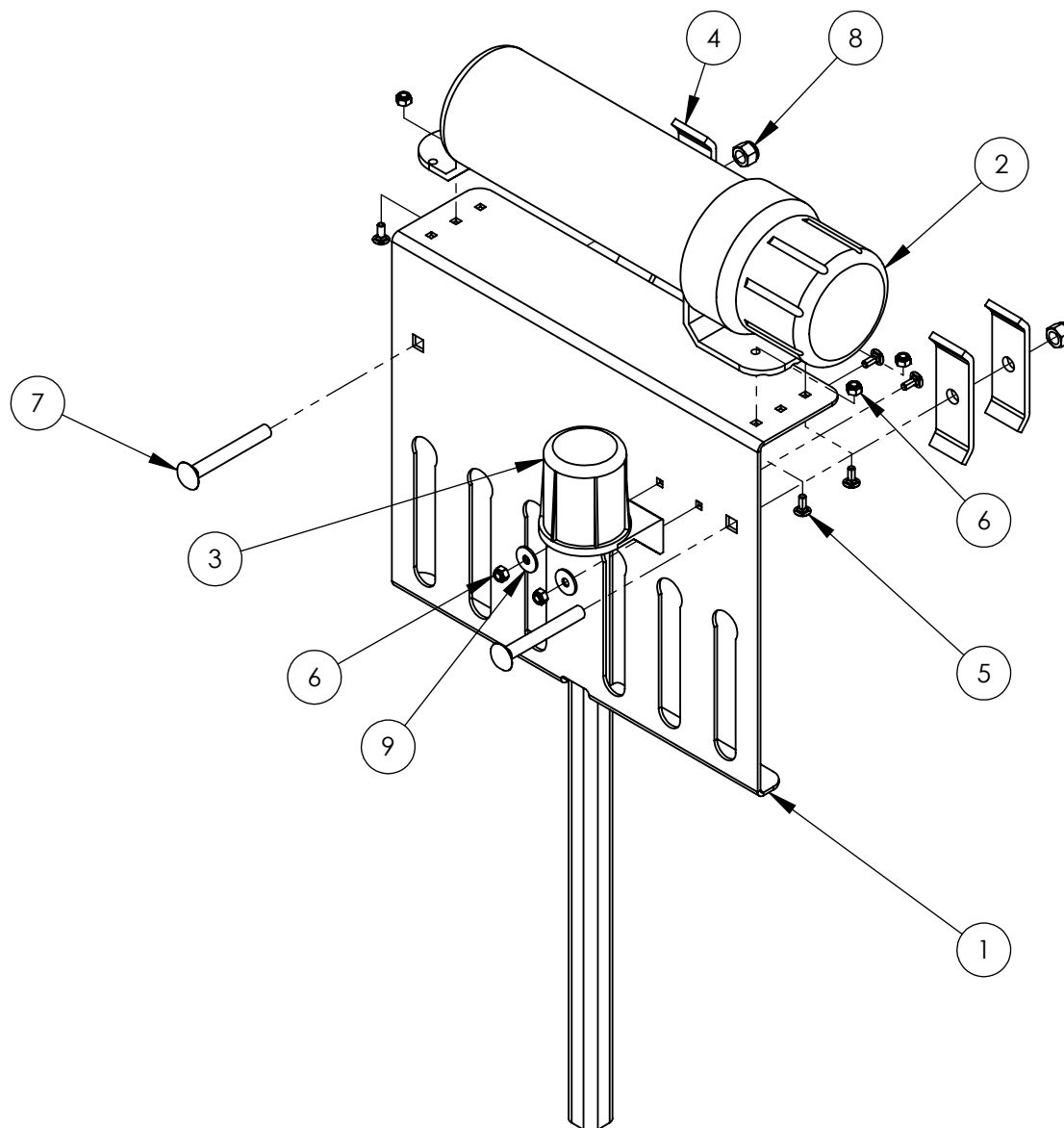
|    | ITEM NO. | QTY | PART NUMBER  | DESCRIPTION                          |
|----|----------|-----|--------------|--------------------------------------|
| +  | 1        | 1   | C10981       | 699 LITE TONGUE WELDMENT             |
| ++ | 2        | 1   | C10578       | 699 TONGUE WELDMENT                  |
|    | 3        | 1   | C10579       | 699 TELESCOPE WELDMENT               |
|    | 4        | 2   | GPSPEC24080  | 1 1/2" x 8 1/4" LG. WING HINGE PIN   |
|    | 5        | 2   | BL10         | 5/8" LOCKWASHER                      |
|    | 6        | 2   | B1015        | 5/8 X 1 1/2" PLATED BOLT             |
|    | 7        | 2   | B0625        | 3/8"NC x 2 1/2" LG. HEX BOLT         |
|    | 8        | 1   | B0820        | 1/2"NC x 2" LG. HEX BOLT             |
|    | 9        | 2   | B0525        | 5/16 x 2 1/2" BOLT                   |
|    | 10       | 1   | GJ8002       | 8000 LB TONGUE JACK                  |
|    | 11       | 1   | GP100414C03  | 5/8" DIA x 4 1/4" PIN RING & WASHER  |
|    | 12       | 1   | GHP11        | #11 HAIR PIN                         |
| +  | 13       | 1   | GJ652027     | 20,000 LB SAFETY CHAIN               |
| ++ | 14       | 1   | GJ35K48      | 35,000 LB SAFETY CHAIN - 48" LG.     |
| ++ | 15       | 1   | L01063       | 35,000 LB SAFETY CHAIN ADAPTOR       |
|    | 16       | 1   | PPI-42XL     | CAT 4 CAST IRON HITCH                |
|    | 17       | 2   | B1680H       | 1" x 8" NC HEX BOLT GR. 8            |
|    | 18       | 4   | BF16HS       | 1" HARD STRUCTURAL WASHER            |
|    | 19       | 2   | BN16L        | 1-8 NC NYLOCK NUT                    |
|    | 20       | 1   | GP1600512A05 | PIN 1" DIA. x 5 1/2" LG. - 2 HOLES   |
|    | 21       | 2   | GP2000612B06 | 1 1/4" x 6 1/2" LG. PIN - 1 HOLE     |
|    | 22       | 2   | BF16S        | 1" SAE WASHER                        |
|    | 23       | 2   | BN06L        | 3/8"-16NC LOCK NUT                   |
|    | 24       | 2   | ZD201002     | 1.280" ID x 2" OD x 1/2" LG COLLAR   |
|    | 25       | 2   | BSC0515      | 5/16" x 1 1/2" COTTER PIN            |
|    | 26       | 1   | A60104A      | 699 OPERATOR STATION WITH HARDWARE   |
|    | 27       | 2   | BU0410       | 1/4 x 1" x 1 1/2" U-BOLT             |
|    | 28       | 4   | BN04L        | 1/4" LOCK NUT                        |
|    | 29       | 1   | A60091       | 3 1/2" TURNBUCKLE TELESCOPE ADJUSTER |
|    | 30       | 1   | GHP15        | 7/16 X 2" LYNCH PIN                  |
|    | 31       | 1   | C1008        | DEPTH CONTROL DISC ASSEMBLY          |
|    | 32       | 1   | HPMSC10      | STROKE CONTROL VALVE                 |
|    | 33       | 1   | C10991       | 699 DEPTH CONTROL ROD                |
|    | 34       | 1   | BN08L        | 1/2" NYLOCK NUT NC                   |
|    | 35       | 2   | BN05L        | 5/16" LOCK NUT                       |
|    | 36       | 1   | C11058       | 699/RT99 TELESCOPE LOCK              |

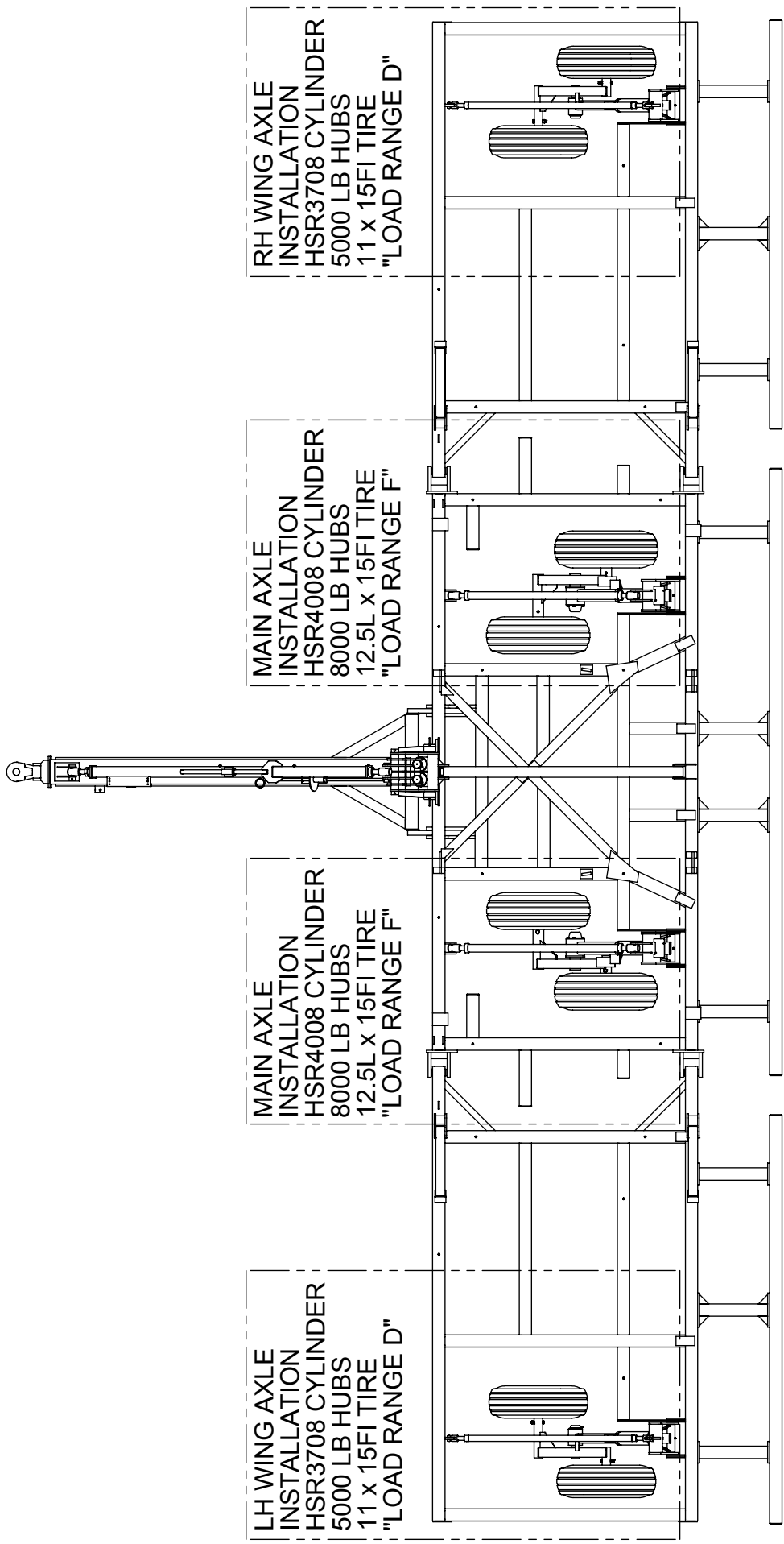
+ Use on 24' machines

++ Use on 26' and up machines

## 699 Hose Holder Assembly

| ITEM NO. | QTY | PART NUMBER | DESCRIPTION                                      |
|----------|-----|-------------|--------------------------------------------------|
| 1        | 1   | A60104      | OPERATOR STATION/HOSE HOLDER                     |
| 2        | 1   | G106        | HD OPERATORS MANUAL HOLDER                       |
| 3        | 1   | GL11750     | LIGHT PLUG HOLDER - PLASTIC                      |
| 4        | 4   | P0160B      | HOSE CLAMP 4"                                    |
| 5        | 5   | BC0205      | 10-24 x 1/2" A307A LOW CARBON ZINC CARRIAGE BOLT |
| 6        | 5   | BN02L       | #10-24 NYLOCK NUT                                |
| 7        | 2   | BC0630      | 3/8"NC x 3" LG. CARRIAGE BOLT                    |
| 8        | 2   | BN06L       | 3/8"-16NC LOCK NUT                               |
| 9        | 2   | BF04        | 1/4" FLATWASHER                                  |



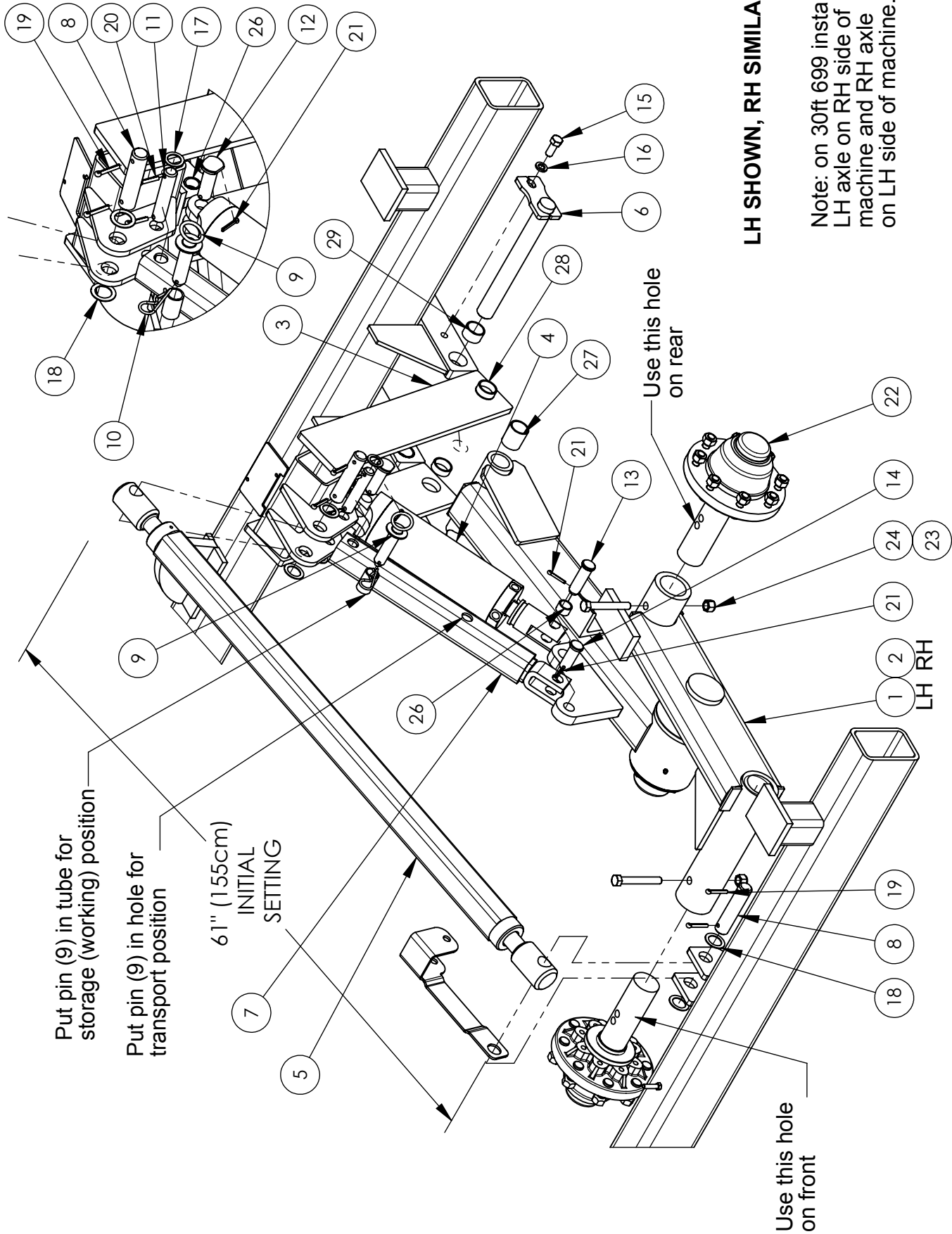


**34 & 40' 699 DISC CULTIVATOR  
WHEEL AND AXLE LAYOUT**

## 699 Main Frame Axle Installation

**LH SHOWN, RH SIMILAR**

Note: on 30ft 699 install  
LH axle on RH side of  
machine and RH axle  
on LH side of machine.



## 699 Main Frame Axle Installation

| ITEM | QTY | PART NO.       | DESCRIPTION                                |
|------|-----|----------------|--------------------------------------------|
| 1    | 1   | C00112L        | 14,000 LB TANDEM AXLE ASSEMBLY LH          |
| 2    | 1   | C00112R        | 14,000 LB TANDEM AXLE ASSEMBLY RH          |
| 3    | 2   | C10013         | MAIN FRAME TOWER                           |
| 4    | 2   | HSR4008        | 4" BORE x 8" STROKE HYD. CYLINDER          |
| 5    | 2   | A60031         | 2 1/2" TURNBUCKLE 50" TUBE                 |
| 6    | 2   | GPH2401312F    | 1 1/2" x 13 7/8" LG. AXLE PIN - HARDENED   |
| 7    | 2   | C50010         | TRANSPORT LOCK ASSEMBLY                    |
| 8    | 4   | GP2000512A05   | 1 1/4" x 5 1/2" PIN - 2 HOLES              |
| 9    | 2   | GP1600414C04   | 1" x 4 1/4" RING & WASHER PIN              |
| 10   | 2   | GHP9           | #9 HAIR PIN                                |
| 11   | 2   | GP16005A05     | PIN 1" DIA. x 5" LG. - 2 HOLES             |
| 12   | 2   | GPHF1600314H04 | 1" x 3 1/4" SHOULDER PIN HARDENED W/FLATS  |
| 13   | 2   | GP1600314H04   | PIN 1" DIA. x 3 1/4" LG. WITH HEAD         |
| 14   | 2   | GP1600258H04   | PIN 1" DIA. x 2 5/8" LG. WITH HEAD         |
| 15   | 2   | B1015          | 5/8 X 1 1/2" PLATED BOLT                   |
| 16   | 2   | BL10           | 5/8" LOCKWASHER                            |
| 17   | 4   | GM26           | 1" MACHINE BUSHING                         |
| 18   | 8   | GM30           | 1 1/4" MACHINE BUSHING                     |
| 19   | 8   | BSC0520        | 5/16" x 2" COTTER PIN                      |
| 20   | 4   | BSC0515        | 5/16" x 1 1/2" COTTER PIN                  |
| 21   | 6   | BSC0415        | 1/4" x 1 1/2" COTTER PIN                   |
| 22   | 4   | GW8000A        | 8000 lb GREASABLE HUB AND 14" SPINDLE ASSY |
| 23   | 4   | B1045          | 5/8 x 4-1/2" BOLT                          |
| 24   | 4   | BN10L          | 5/8" NYLOCK NUT NC                         |
| 25   | 2   | C10716         | 2 1/2" TURNBUCKLE LOCK                     |
| 26   | 4   | GBB125100075   | 1 1/4" x 1" x 3/4" LG. HARD BUSHING        |
| 27   | 4   | GBB175150200   | 1 3/4" x 1 1/2" x 2" LG. HARD BUSHING      |
| 28   | 4   | GBB175150062   | 1 3/4" x 1 1/2" x 5/8" LG. HARD BUSHING    |
| 29   | 4   | GBB175150100   | 1 3/4" x 1 1/2" x 1" LG. HARD BUSHING      |

Note: quantities shown are for complete main frame axle installation - both LH and RH.

1. Line up axle tower (3) and upright of tandem axle assembly (1, 2) with lugs on main frame. Insert 1 1/2" x 13 7/8" flatbar pin (6) through tower and axle. Retain pin with 5/8" x 1 1/2" hex bolt (15) and 5/8" lockwasher (16). Note orientation of lugs on axle towers.

2. Set mainframe turnbuckle (5) to 61" (155cm) long pin to pin. Place turnbuckle lock (25) over turnbuckle and attach turnbuckle to frame with 1 1/4" x 5 1/2" pin (8), 1 1/4" machine bushings (18), and 5/16" x 2" cotter pins (19). Attach turnbuckle to axle tower with 1 1/4" x 5 1/2" pin (8), 1 1/4" machine bushings (18), and 5/16" x 2" cotter pins (10). Note: bushings go between plates and cotter pins.

3. Attach 4" bore x 8" stroke hydraulic cylinder (4) to axle tower and axle beam with 1" x 3 1/4" head pins (12) and 1/4" x 1 1/2" cotter pins (21). **Connect hoses and charge lift axle cylinders with fluid following the procedure in the axle lift hydraulics section of this manual before connecting rod ends of the cylinders and the transport locks.**

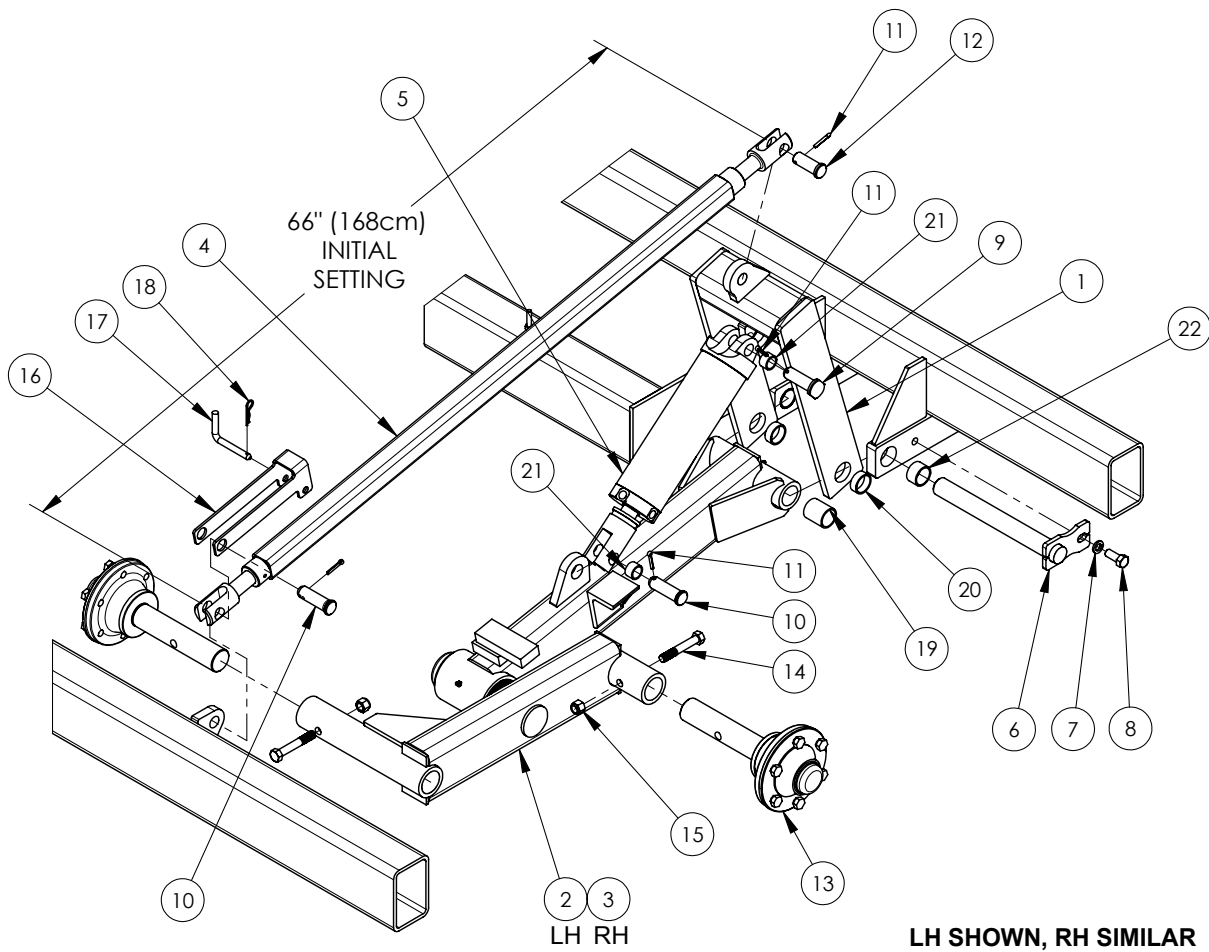
4. Attach transport lock (7) to axle tower with 1" x 5" pin (11) and 5/16" x 1 1/2" cotter pins (20). Attach transport lock to axle beam with 1" x 2 5/8" head pin (14) and 1/4" x 1 1/2" cotter pin (21). Insert 1" x 4 1/4" ring pin (9) into tube on transport lock and retain with #9 hairpin (10).

5. Install 8000 lb hub and spindle assemblies (22) into axles and retain with 5/8" x 4 1/2" hex bolts (23) and 5/8" locknuts (24).

6. Apply grease to all fittings.

Notice: Salford uses replaceable bushings (item 27 - 30). These are slightly oversized and need to be tapped into place with a hammer. When removing worn bushings, take care not to gouge the seat surface.

# 699 Wing Axle Installation



## 699 Wing Axle Installation

| ITEM NO. | QTY. | PART NO.       | DESCRIPTION                               |
|----------|------|----------------|-------------------------------------------|
| 1        | 1    | C10739         | 700-1 PRIMARY WING AXLE TOWER             |
| 2        | 1    | C5540WL        | 8000 LB WING AXLE ASSEMBLY - LH           |
| 3        | 1    | C5540WR        | 8000 LB WING AXLE ASSEMBLY - RH           |
| 4        | 1    | A60020         | 1 1/4" TURNBUCKLE 54" TUBE                |
| 5        | 1    | HSR3708        | 3 3/4" BORE x 8" STROKE HYD. CYLINDER     |
| 6        | 1    | GPH2401312F    | 1 1/2" x 13 7/8" LG. AXLE PIN - HARDENED  |
| 7        | 1    | BL10           | 5/8" LOCKWASHER                           |
| 8        | 1    | B1015          | 5/8 X 1 1/2" PLATED BOLT                  |
| 9        | 1    | GPHF1600314H04 | 1" x 3 1/4" SHOULDER PIN HARDENED W/FLATS |
| 10       | 2    | GP1600314H04   | PIN 1" DIA. x 3 1/4" LG. WITH HEAD        |
| 11       | 4    | BSC0415        | 1/4" x 1 1/2" COTTER PIN                  |
| 12       | 1    | GP1600258H04   | PIN 1" DIA. x 2 5/8" LG. WITH HEAD        |
| 13       | 2    | GW5000A        | 5000 LB HUB AND SPINDLE ASSEMBLY          |
| 14       | 2    | B1040          | 5/8"NC x 4" LG. HEX BOLT                  |
| 15       | 2    | BN10L          | 5/8" NYLOCK NUT NC                        |
| 16       | 1    | FL00051        | LIGHT TURNBUCKLE LOCK                     |
| 17       | 1    | GP0800312L03   | 1/2" x 3 1/2" PARKING STAND PIN           |
| 18       | 1    | GHP11          | #11 HAIR PIN                              |
| 19       | 2    | GBB175150200   | 1 3/4" x 1 1/2" x 2" LG. HARD BUSHING     |
| 20       | 2    | GBB175150062   | 1 3/4" x 1 1/2" x 5/8" LG. HARD BUSHING   |
| 21       | 2    | GBB125100075   | 1 1/4" x 1" x 3/4" LG. HARD BUSHING       |
| 22       | 2    | GBB175150100   | 1 3/4" x 1 1/2" x 1" LG. HARD BUSHING     |

Note: quantities shown are for wing axle installation on one side only. Double quantities for complete machine wing axle installation.

1. Line up axle tower (1) and upright of tandem axle assembly (2, 3) with lugs on wing frames. Insert axle flatbar pin (6) through tower and axle. Retain pin with 5/8" x 1 1/2" hex bolt (8) and 5/8" lockwasher (7). Note orientation of lugs on axle towers.

2. Set wing turnbuckle (4) to 66" (168cm) long pin to pin. Attach turnbuckle to axle tower with 1" x 2 5/8" head pins (12) and 1/4" x 1 1/2" cotter pins (11). Place turnbuckle lock (16) over turnbuckle and attach to frame with 1" x 3 1/4" head pin (10) and 1/4" x 1 1/2" cotter pin (11). Secure turnbuckle lock to turnbuckle with 1/2" x 3 1/2" L-pin (17) and #11 hairpin (18).

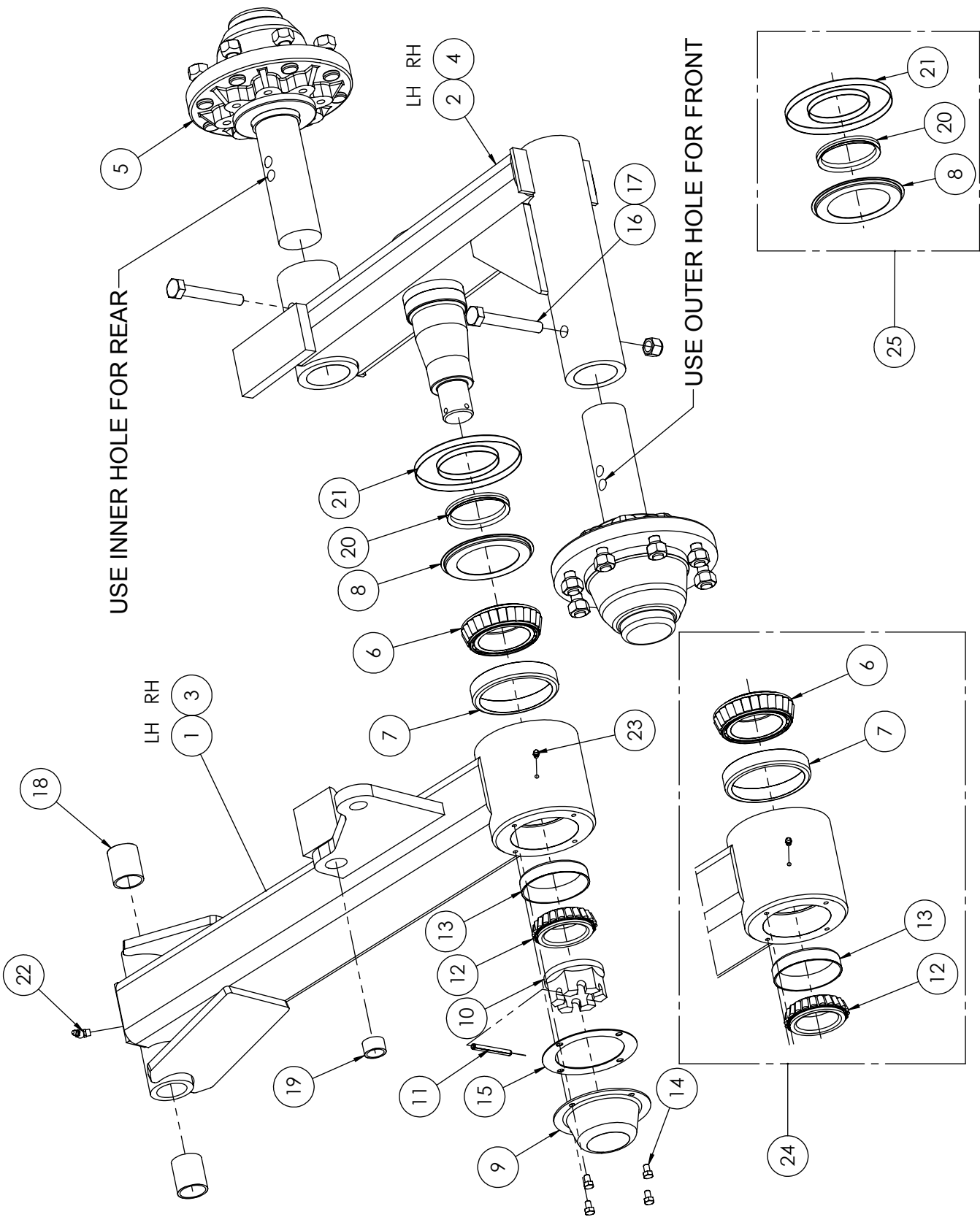
3. Attach 3 3/4" x 8" hydraulic cylinder (5) to axle tower and axle beam with 1" x 3 1/4" head pins (9/10) and 1/4" x 1 1/2" cotter pins (11). **Connect hoses and charge lift axle cylinders with fluid following the procedure in the hydraulics installation before connecting rod ends of the cylinders.**

4. Insert 5000 lb hub and spindle assemblies (13) into axles and retain with 5/8" x 4" hex bolts (14) and 5/8" locknuts (15).

5. Apply grease to all fittings.

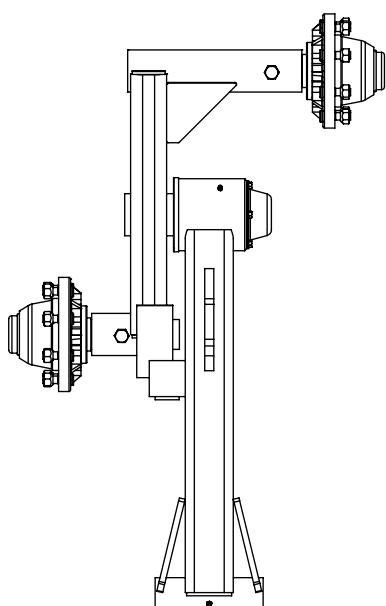
Notice: Salford uses replaceable bushings (Item 19 - 22). The bushings are oversized and will need to be tapped into place with a hammer. When removing worn bushings, take care not to gouge the seat surface.

# 14,000 lb Tandem Axle Assembly

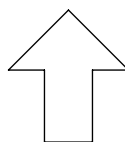


## 14,000 lb Tandem Axle Assembly

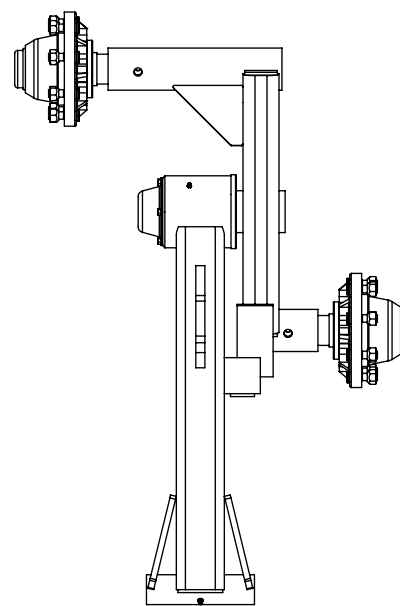
| ITEM NO. | QTY | PART NUMBER  | DESCRIPTION                                |
|----------|-----|--------------|--------------------------------------------|
| 1        | 1   | C00110L      | 14,000 LB UPRIGHT BEAM - LH                |
| 2        | 1   | C00111L      | 14,000 LB WALKING BEAM - LH                |
| 3        | 1   | C00110R      | 14000 LB UPRIGHT BEAM - RH                 |
| 4        | 1   | C00111R      | 14000 LB WALKING BEAM - RH                 |
| 5        | 2   | GW8000A      | 8000 lb GREASABLE HUB AND 14" SPINDLE ASSY |
| 6        | 1   | GB42687      | 14,000 LB INNER CONE                       |
| 7        | 1   | GB42620      | 14,000 LB INNER CUP                        |
| 8        | 1   | GW14110VC    | 14000 LB V-SEAL COUNTERFACE                |
| 9        | 1   | GW14112      | 14,000 LB DUST CAP                         |
| 10       | 1   | BN28SF       | 1 3/4" NF SLOTTED FLANGE NUT               |
| 11       | 1   | BSR0527      | 5/16" x 2 3/4" ROLL PIN                    |
| 12       | 1   | GB28995      | 12000 LB CONE, 10000 LB INNER CONE         |
| 13       | 1   | GB28921      | 12000 LB CUP, 10000 LB INNER CUP           |
| 14       | 4   | B0505        | 5/16"NC x 1/2" LG. HEX BOLT                |
| 15       | 1   | GW14112S     | 14,000 LB DUST CAP SEAL                    |
| 16       | 2   | B1045        | 5/8 x 4 1/2" HEX BOLT GR 5                 |
| 17       | 2   | BN10L        | 5/8" NYLOCK NUT NC                         |
| 18       | 2   | GBB175150200 | 1 3/4" x 1 1/2" x 2" LG. HARD BUSHING      |
| 19       | 1   | GBB125100075 | 1 1/4" x 1" x 3/4" LG. HARD BUSHING        |
| 20       | 1   | GW14110VS    | 14,000 LB V-SEAL                           |
| 21       | 1   | GW14110VW    | 14000 LB V-SEAL GRASS WRAP GUARD           |
| 22       | 1   | GF1688       | 1/8" NPT GREASE FITTING 45deg              |
| 23       | 1   | GF641        | 1/4"-28NF GREASE FITTING                   |
| 24       | 1   | GW14111-1    | 14000LB BEARING KIT                        |
| 25       | 1   | GW14110V     | 14,000 LB V-SEAL KIT                       |



LH AXLE  
ASSEMBLY

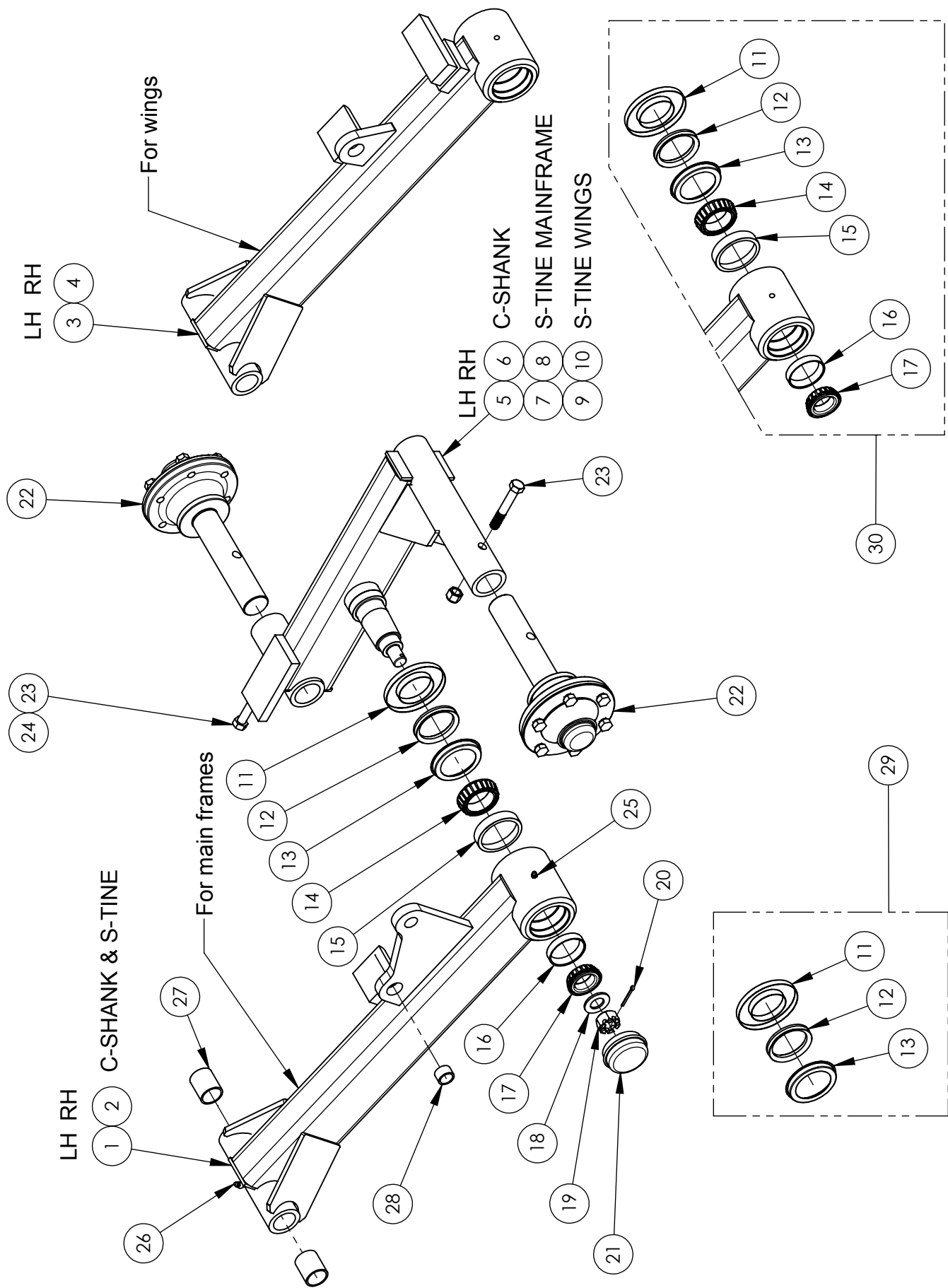


FRONT



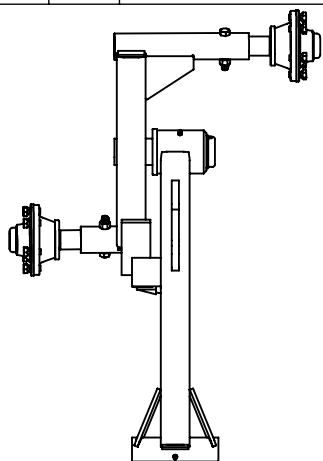
RH AXLE  
ASSEMBLY

# 8000 lb Tandem Axle Assembly



## 8000 lb Tandem Axle Assembly

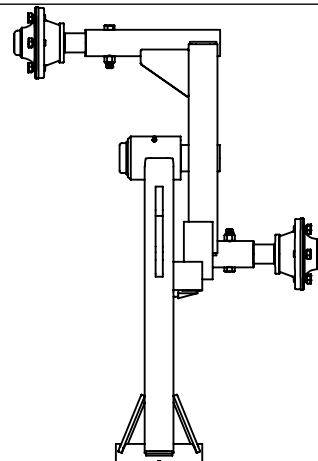
| ITEM NO. | QTY | PART NO.     | DESCRIPTION                                |
|----------|-----|--------------|--------------------------------------------|
| 1        | 1   | C5542L       | 8000 LB UPRIGHT BEAM - LH                  |
| 2        | 1   | C5542R       | 8000 LB UPRIGHT BEAM - RH                  |
| 3        | 1   | C5542WL      | 8000 LB WING UPRIGHT BEAM - LH             |
| 4        | 1   | C5542WR      | 8000 LB WING UPRIGHT BEAM - RH             |
| 5        | 1   | C5541L       | 8000 LB WALKING BEAM - LH                  |
| 6        | 1   | C5541R       | 8000 LB WALKING BEAM - RH                  |
| 7        | 1   | C00137L      | 8000 LB S-TINE AXLE MAIN WALKING BEAM - LH |
| 8        | 1   | C00137R      | 8000 LB S-TINE AXLE MAIN WALKING BEAM - RH |
| 9        | 1   | C5541WL      | 8000 LB WALKING BEAM - WING LH             |
| 10       | 1   | C5541WR      | 8000 LB WALKING BEAM - WING RH             |
| 11       | 1   | GW8110VW     | 8000 LB V-SEAL GRASS WRAP GUARD            |
| 12       | 1   | GW8110VS     | 8000 LB V-SEAL                             |
| 13       | 1   | GW8110VC     | 8000 LB V-SEAL COUNTERFACE                 |
| 14       | 1   | GB506849     | 8000 INNER CONE                            |
| 15       | 1   | GB506810     | 8000 INNER CUP                             |
| 16       | 1   | GB501310     | 8000 OUTER CUP                             |
| 17       | 1   | GB501349     | 8000 OUTER CONE                            |
| 18       | 1   | GW8108       | 1" SPINDLE WASHER                          |
| 19       | 1   | BN16SF       | 1" NF SLOTTED HEX NUT                      |
| 20       | 1   | BSC0317      | 3/16" x 1 3/4" COTTER PIN                  |
| 21       | 1   | GW8112       | 8000 DUST CAP                              |
| 22       | 2   | GW5000A      | 5000 LB HUB AND SPINDLE ASSEMBLY           |
| 23       | 2   | B1040        | 5/8"NC x 4" LG. HEX BOLT                   |
| 24       | 2   | BN10L        | 5/8" NYLOCK NUT NC                         |
| 25       | 1   | GF1610       | 1/8" NPT GREASE FITTING                    |
| 26       | 1   | GF1688       | 1/8" NPT GREASE FITTING 45deg              |
| 27       | 2   | GBB175150200 | 1 3/4" x 1 1/2" x 2" LG. HARD BUSHING      |
| 28       | 1   | GBB125100075 | 1 1/4" x 1" x 3/4" LG. HARD BUSHING        |
| 29       | 1   | GW8110V      | 8000 LB V-SEAL KIT                         |
| 30       | 1   | GW8111V      | 8000 LB BEARING WITH V-SEAL KIT            |



**LH AXLE  
ASSEMBLY**

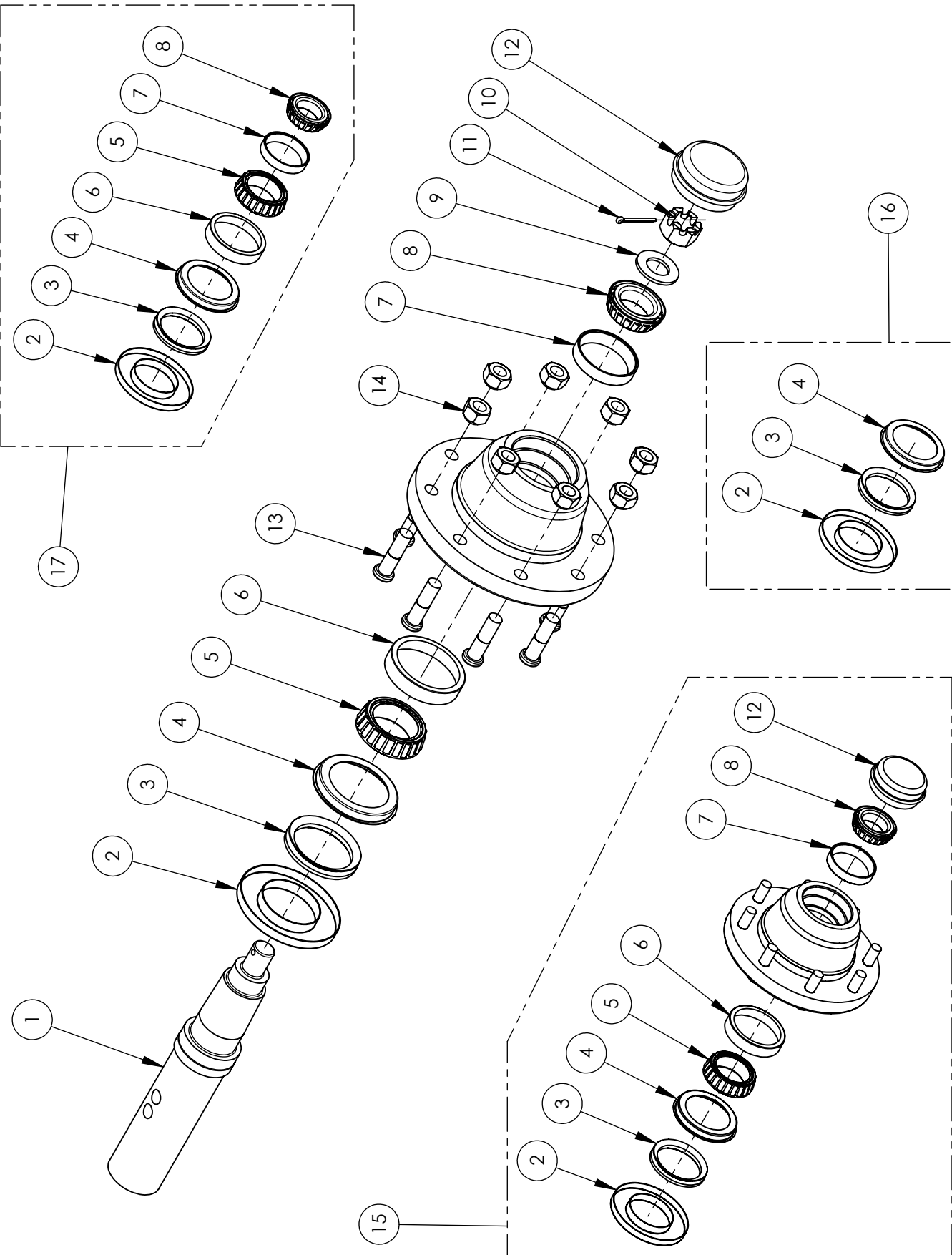


**FRONT**



**RH AXLE  
ASSEMBLY**

# 8000 lb Hub and Spindle Assembly

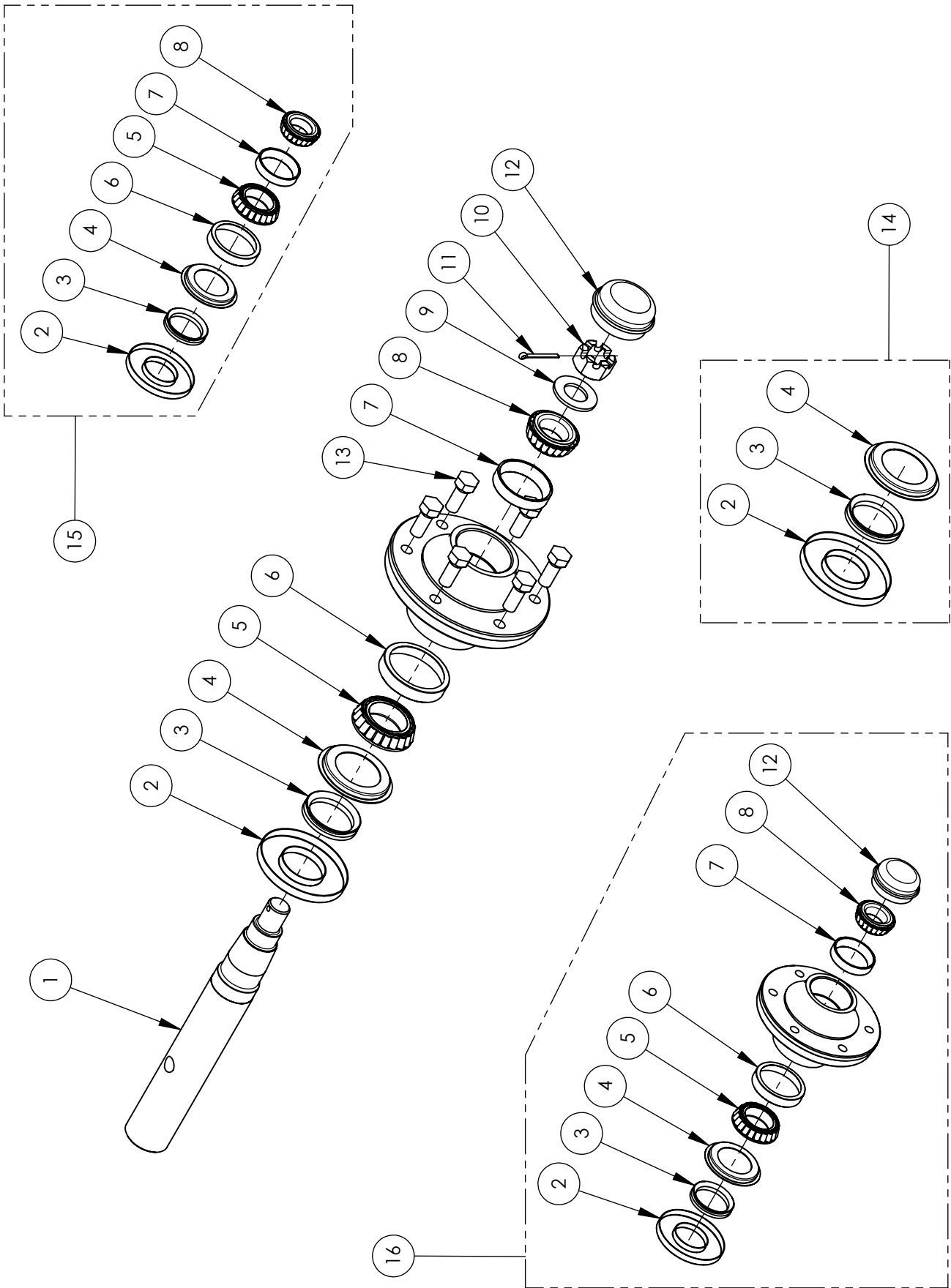


## 8000 lb Hub and Spindle Assembly

| ITEM NO. | QTY | PART NUMBER | DESCRIPTION                                  |
|----------|-----|-------------|----------------------------------------------|
| 1        | 1   | GW8014      | SPINDLE, 8 000 LBS.                          |
| 2        | 1   | GW8110VW    | 8000 LB V-SEAL GRASS WRAP GUARD              |
| 3        | 1   | GW8110VS    | 8000 LB V-SEAL                               |
| 4        | 1   | GW8110VC    | 8000 LB V-SEAL COUNTERFACE                   |
| 5        | 1   | GB506849    | 8000 INNER CONE                              |
| 6        | 1   | GB506810    | 8000 INNER CUP                               |
| 7        | 1   | GB501310    | 8000 OUTER CUP                               |
| 8        | 1   | GB501349    | 8000 OUTER CONE                              |
| 9        | 1   | GW8108      | 1" SPINDLE WASHER                            |
| 10       | 1   | BN16S       | 1" SLOTTED HEX NUT                           |
| 11       | 1   | BSC0317     | 3/16" x 1 3/4" COTTER PIN                    |
| 12       | 1   | GW8112      | 8000 DUST CAP                                |
| 13       | 8   | BW1020      | 5/8" x 2" PRESS-IN WHEEL STUD                |
| 14       | 8   | BW10        | 5/8" WHEEL LUG NUT                           |
| 15       | 1   | GW8000      | 8000 LB HUB WITH BEARINGS, V-SEAL, & DUSTCAP |
| 16       | 1   | GW8110V     | 8000 LB V-SEAL KIT                           |
| 17       | 1   | GW8111V     | 8000 LB BEARING WITH V-SEAL KIT              |

Entire assembly available as part number GW8000A (includes hub, spindle, bearings, seal, dust cap, and hardware).

# 5000 lb Hub and Spindle Assembly

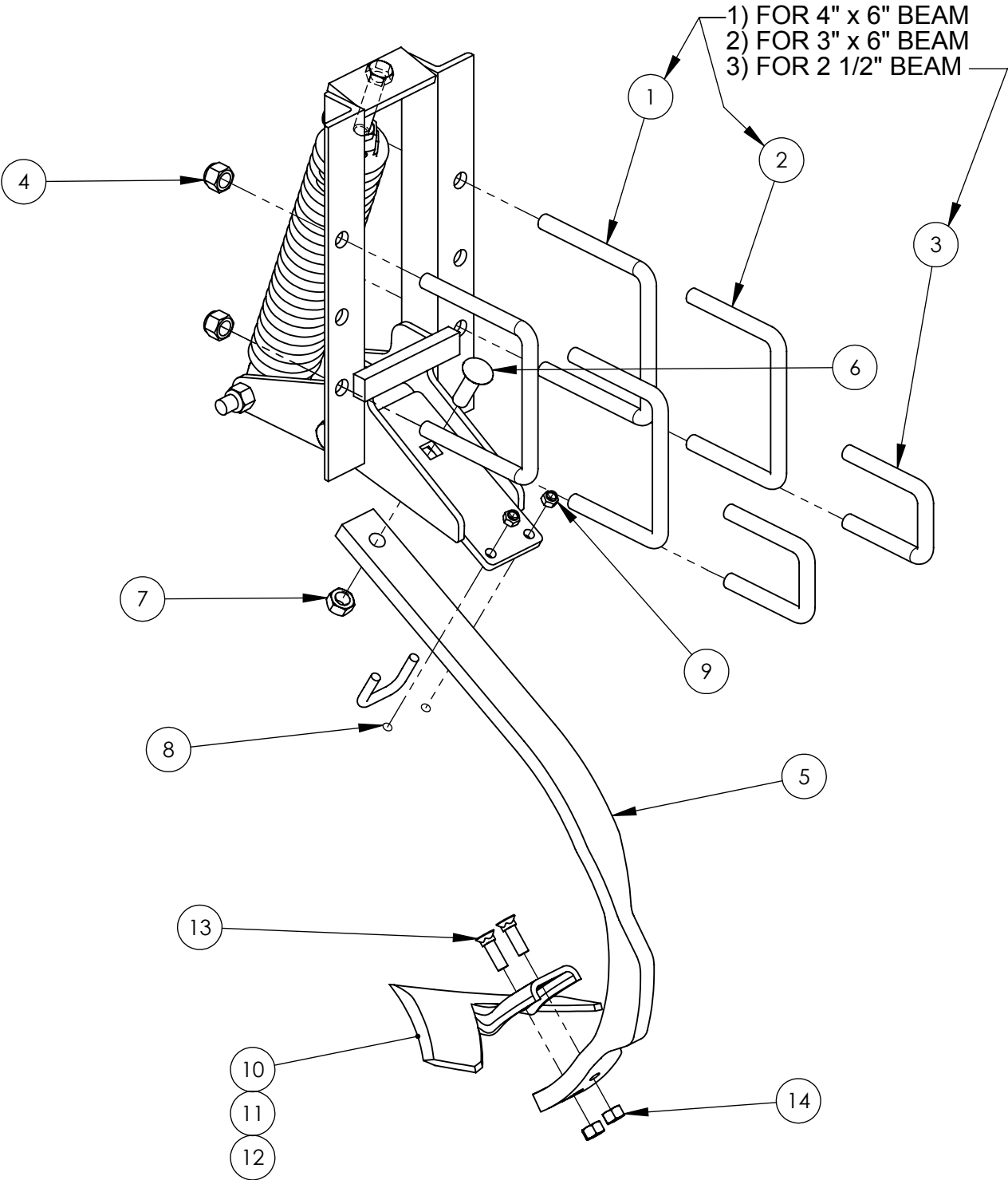


## 5000 lb Hub and Spindle Assembly

| ITEM | QTY | PART NO. | DESCRIPTION                                 |
|------|-----|----------|---------------------------------------------|
| 1    | 1   | GW5014   | 5000 LB SPINDLE-14 IN. LG                   |
| 2    | 1   | GW5110VW | 5000 LB V-SEAL GRASS WRAP GUARD             |
| 3    | 1   | GW5110VS | 5000 LB V-SEAL                              |
| 4    | 1   | GW5110VC | 5000 LB SEAL COUNTERFACE                    |
| 5    | 1   | GB603049 | 5000/5500 LB INNER CONE                     |
| 6    | 1   | GB603011 | 5000/5500 LB INNER CUP                      |
| 7    | 1   | GB48510  | 5000/5500 LB OUTER CUP, 3000 LB INNER CUP   |
| 8    | 1   | GB48548  | 5000/5500 LB OUTER CONE, 3000 LB INNER CONE |
| 9    | 1   | BF16-9   | 1" HARD SAE FLAT WASHER GR.9 PLATED         |
| 10   | 1   | BN16SF   | 1" NF SLOTTED HEX NUT                       |
| 11   | 1   | BSC0317  | 3/16" x 1 3/4" COTTER PIN                   |
| 12   | 1   | GW5112   | 5000/5500 LB DUST CAP                       |
| 13   | 6   | BW0912   | 9/16"-18 x 1 1/4" WHEEL BOLT                |
| 14   | 1   | GW5110V  | 5000 LB V-SEAL KIT                          |
| 15   | 1   | GW5111V  | 5000 LB BEARING WITH V-SEAL KIT             |
| 16   | 1   | GW5000B  | 5000 LB HUB WITH BEARINGS, SEAL, & DUST CAP |

Complete assembly available as part number GW5000A (includes hub, spindle, bearings, seals, dust cap, and hardware).

# Shank Assembly and Parts

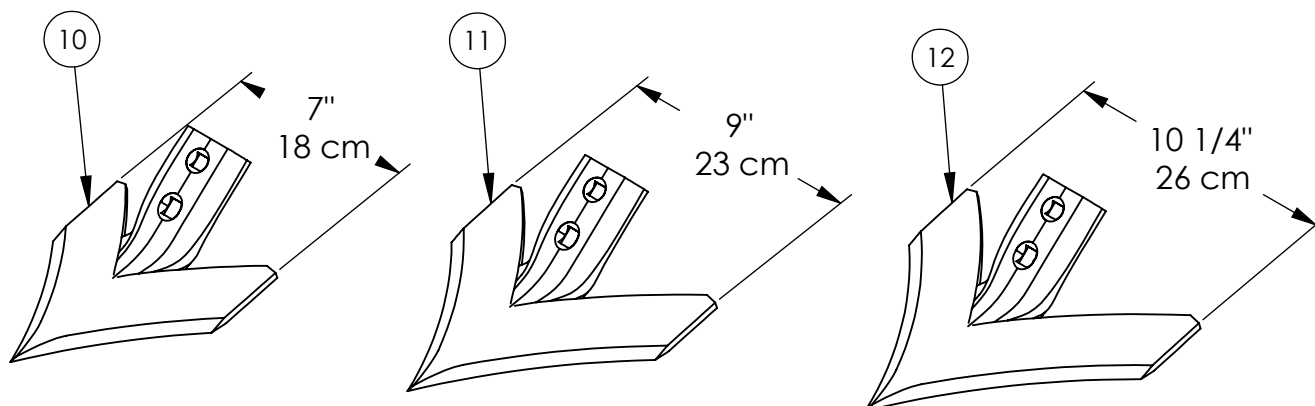


## Shank Assembly and Parts

| ITEM | QTY | PART NO. | DESCRIPTION                                |
|------|-----|----------|--------------------------------------------|
| 1    | 2   | BU1061   | U-BOLT 5/8" x 6" x 5 1/2"                  |
| 2    | 2   | BU1062   | U-BOLT 5/8" x 6" x 4 1/2"                  |
| 3    | 2   | BU1025   | U-BOLT 5/8" x 2 1/2" x 4"                  |
| 4    | 4   | BN10L    | 5/8" NYLOCK NUT NC                         |
| 5    | 1   | CT5261   | FORGED C-SHANK EDGE BENT LEAF 3/4 X 1 3/4" |
| 6    | 1   | BC1020H  | 5/8"NC x 2" LG. CARRIAGE BOLT              |
| 7    | 1   | BN10S    | 5/8" NC STOVER LOCK NUT                    |
| 8    | 1   | BU0617   | 3/8 X 1 3/4 X 1 3/4" U-BOLT                |
| 9    | 2   | BN06S    | 3/8"-16NC STOVER LOCK NUT                  |
| 10   | 1   | CT5074   | 7" SWEEP                                   |
| 11   | 1   | CT5094   | 9" SWEEP                                   |
| 12   | 1   | CT5107   | 10 1/4" SWEEP x 7.5 mm THICK               |
| 13   | 2   | BP0715   | 7/16"NC x 1 1/2" PLOW BOLT                 |
| 14   | 2   | BN07H    | 7/16"NC HEAVY HEX NUT                      |

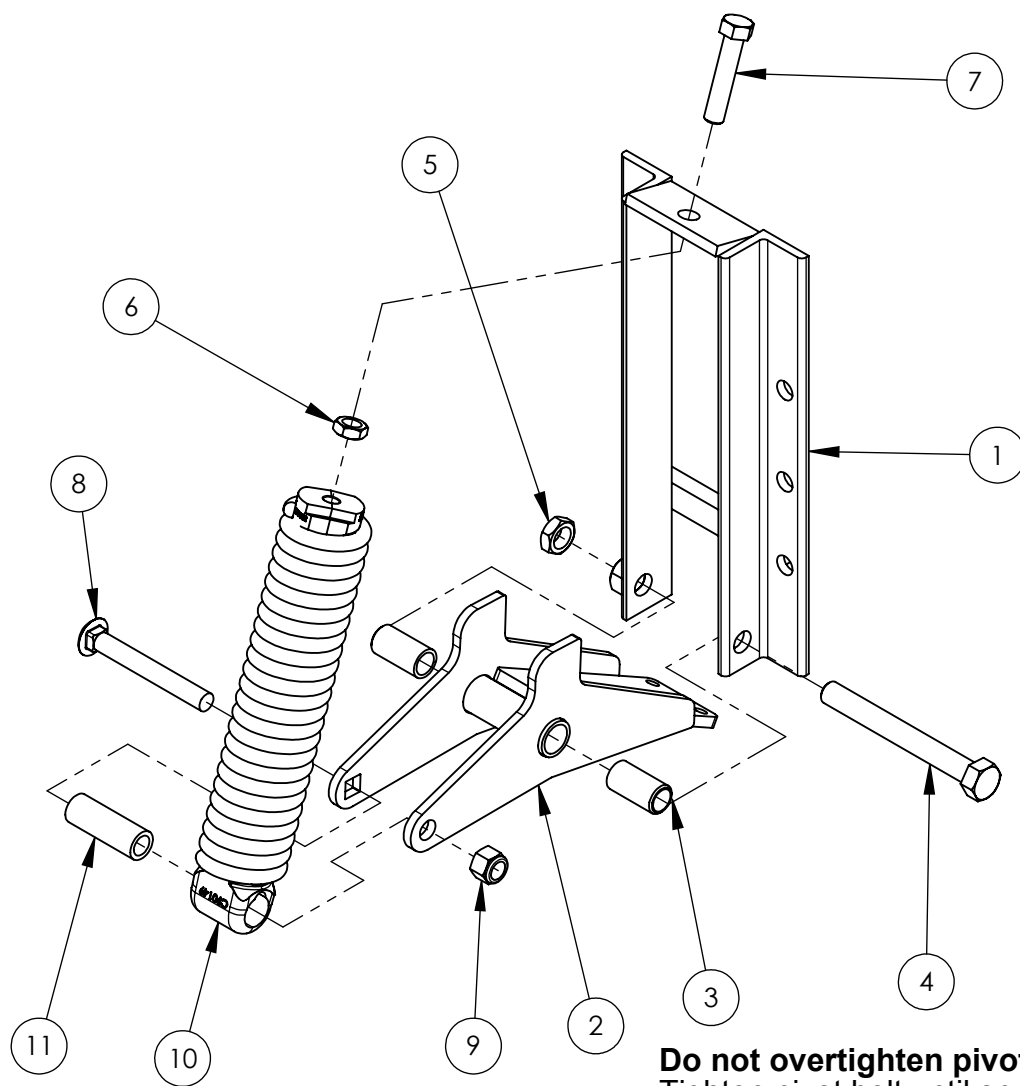
Shank head assembly is preassembled at the factory. See shank head parts drawing for replacement parts for shank head.

1. Insert shank leaf (5) into shank head. Retain leaf with 5/8" x 2" carriage bolt (6) and 5/8" crimp nut (7). Place 3/8" x 1 3/4" x 1 3/4" u-bolt (8) over leaf and tighten with 3/8" lock nuts (9).
2. Attach sweep (10, 11, or 12) to front of shank with 7/16" x 1 1/2" plow bolts (13) and 7/16" heavy hex nuts (14).
3. Mount shanks on frame using 5/8" u-bolt(1, 2, or 3) and 5/8" lock nuts (4). See shank layout drawing for shank mounting locations.



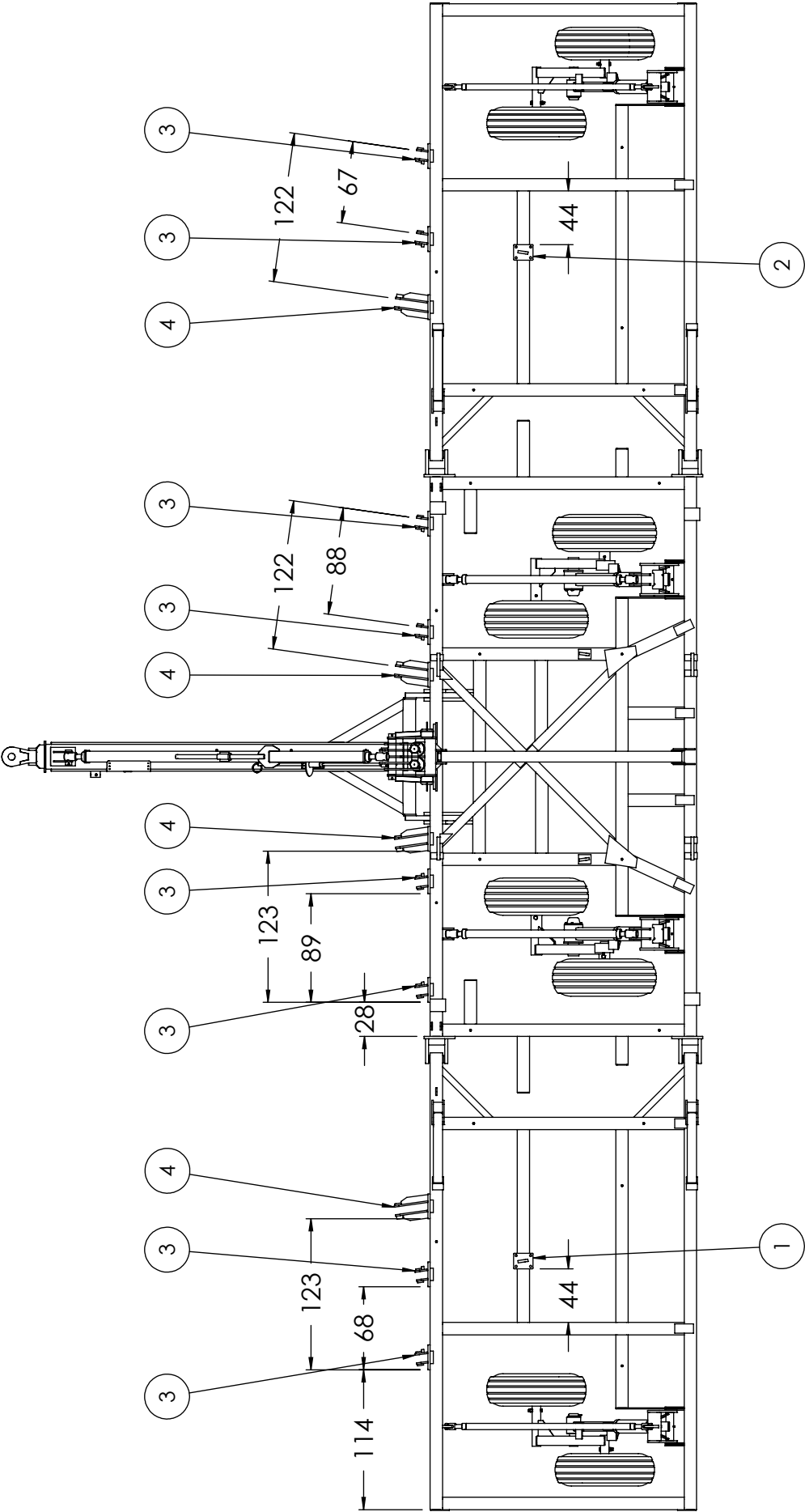
## Shank Head Parts

| ITEM | QTY | PART NO. | DESCRIPTION                               |
|------|-----|----------|-------------------------------------------|
| 1    | 1   | C90124   | OUTER C-SHANK WELDMENT                    |
| 2    | 1   | C90122   | INNER C-SHANK WELDMENT                    |
| 3    | 2   | A60059   | 1 OD-3/4 ID X 1 15/16" LONG BUSHING       |
| 4    | 1   | B1265    | 3/4"NC x 6 1/2" LG. HEX BOLT GR. 5        |
| 5    | 1   | BN12J    | 3/4" JAM NUT                              |
| 6    | 1   | BN10J    | 5/8"NC JAM NUT GR. 5                      |
| 7    | 1   | B1030TH  | 5/8 NC X 3" LG. TAP BOLT GR. 5 PLATED     |
| 8    | 1   | BC1050H  | 5/8"NC x 5" LG. CARRIAGE BOLT GR. 5       |
| 9    | 1   | BN10L    | 5/8" NYLOCK NUT NC                        |
| 10   | 1   | GSE0824A | 1/2" RESET SPRING 24 TOTAL COILS W/ PLUGS |
| 11   | 1   | ZD101079 | 1" OD x 11/16" ID x 2 7/8" DOM            |

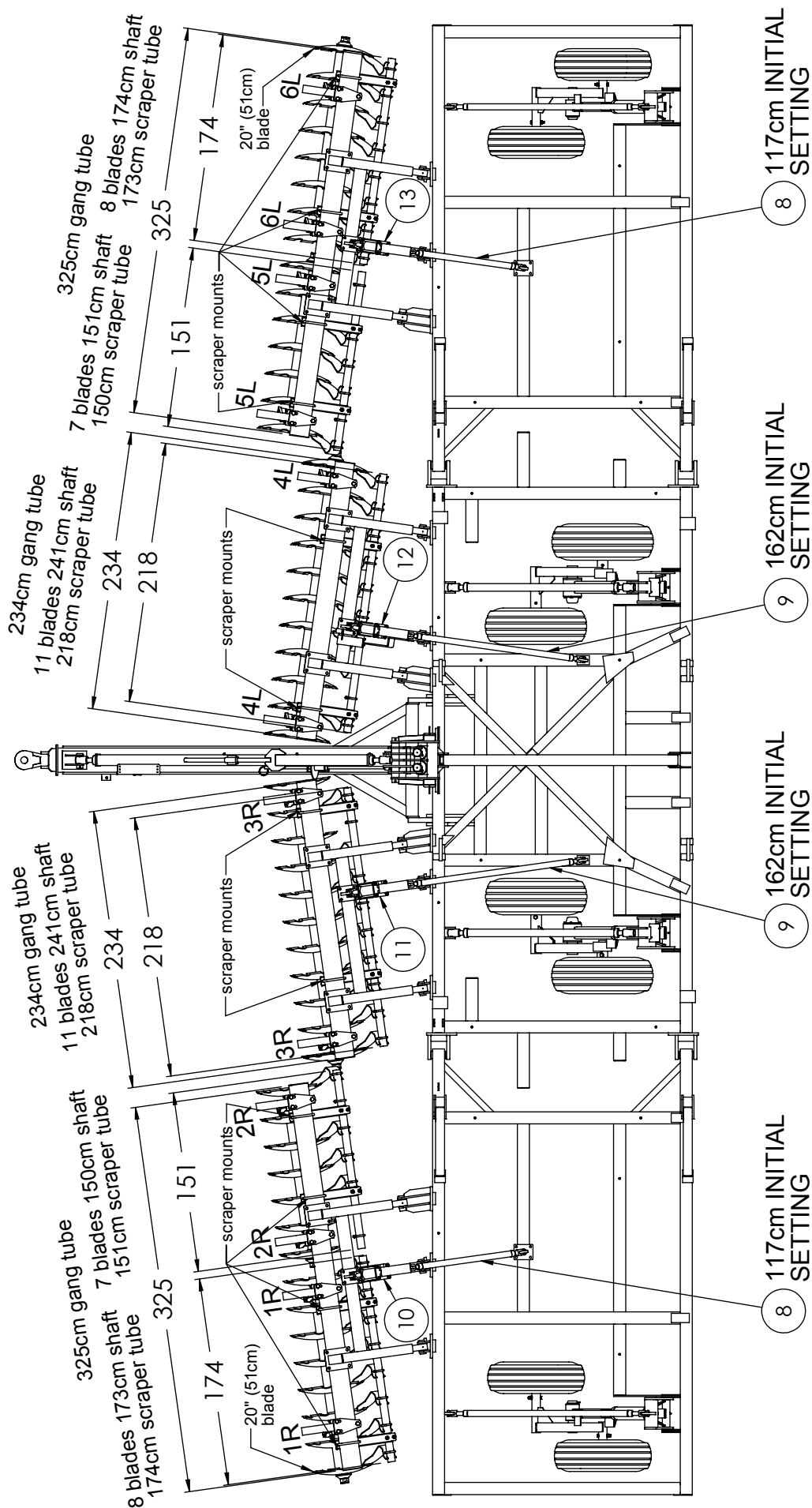


**Do not overtighten pivot bolt (4).**  
Tighten pivot bolt until snug, then lock  
with jam nut (5).

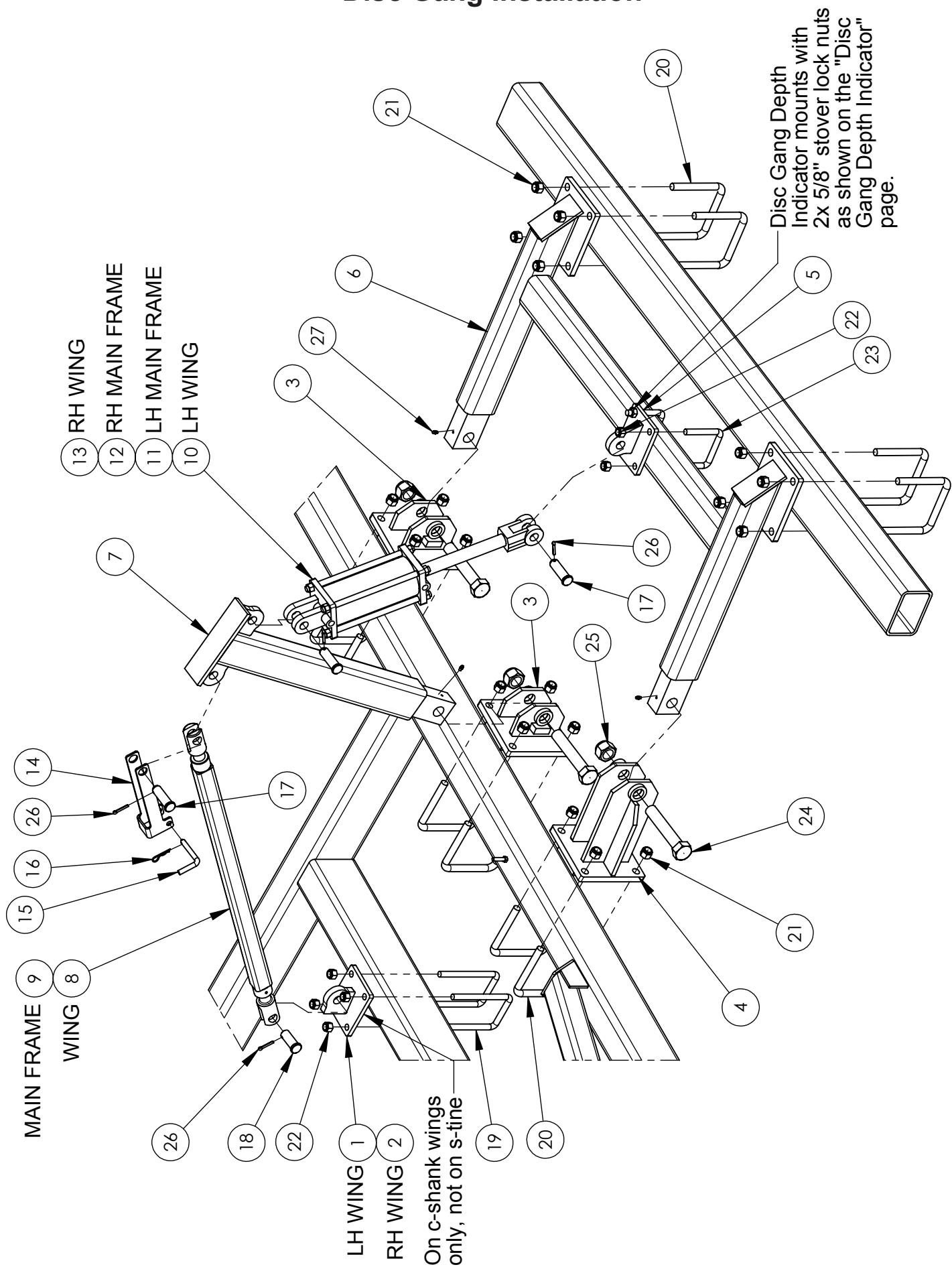




**699 40' DISC CULTIVATOR  
GANG MOUNT LOCATIONS**  
See gang installation drawing for part numbers  
Dimensions in cm



# Disc Gang Installation



## Disc Gang Installation

| ITEM NO. | QTY. | PART NO.     | DESCRIPTION                            |
|----------|------|--------------|----------------------------------------|
| 1        | 1    | C10773L      | 699 WING BOLT-ON GANG ANCHOR - LH      |
| 2        | 1    | C10773R      | 699 WING BOLT-ON GANG ANCHOR - RH      |
| 3        | 8    | C10774       | 699 SHORT BOLT-ON GANG MOUNT           |
| 4        | 4    | C10775       | 699 LONG BOLT-ON GANG MOUNT            |
| 5        | 4    | C10778       | 699 GANG CYLINDER LUG                  |
| 6        | 4    | C10779       | 48" 699 GANG MOUNT SUB-FRAME           |
| 7        | 4    | C10780       | 699 GANG CYLINDER MAST                 |
| 8        | 2    | A60022       | 1 1/4" TURNBUCKLE 36" TUBE             |
| 9        | 2    | A60020       | 1 1/4" TURNBUCKLE 54" TUBE             |
| 10       | 1    | HCR4008      | MONARCH 4" x 8" REPHASING CYLINDER     |
| 11       | 1    | HCR3708      | MONARCH 3 3/4" x 8" REPHASING CYLINDER |
| 12       | 1    | HCR3508      | MONARCH 3 1/2" x 8" REPHASING CYLINDER |
| 13       | 1    | HCR3208      | MONARCH 3 1/4" x 8" REPHASING CYLINDER |
| 14       | 4    | FL00051      | LIGHT TURNBUCKLE LOCK                  |
| 15       | 4    | GP0800312L03 | 1/2" x 3 1/2" PARKING STAND PIN        |
| 16       | 4    | GHP11        | #11 HAIR PIN                           |
| 17       | 12   | GP1600314H04 | PIN 1" DIA. x 3 1/4" LG. WITH HEAD     |
| 18       | 4    | GP1600258H04 | PIN 1" DIA. x 2 5/8" LG. WITH HEAD     |
| 19       | 4    | BU1046       | U-BOLT 5/8" x 4" x 7 1/2" LG.          |
| 20       | 40   | BU1260       | 3/4" x 6 x 6 1/2" U-BOLT               |
| 21       | 80   | BN12L        | 3/4" NC NYLOCK NUT                     |
| 22       | 24   | BN10L        | 5/8" NYLOCK NUT NC                     |
| 23       | 8    | BU1043       | U-BOLT 5/8" x 4" x 4 1/2"              |
| 24       | 12   | B2070        | 1 1/4"NC x 7" HEX BOLT GR. 5           |
| 25       | 12   | BN20L        | 1 1/4"NC LOCK NUT                      |
| 26       | 16   | BSC0415      | 1/4" x 1 1/2" COTTER PIN               |
| 27       | 12   | GF641        | 1/4"-28NF GREASE FITTING               |

Quantities shown are for complete machine.

1. Mount short and long gang mounts (3 & 4) to front beam of main frame and wings using 3/4" x 6" x 6 1/2" u-bolts (20) and 3/4" lock nuts (21). See gang mount layout drawing for locations. Do not tighten bolts yet, leave them loose enough for adjustment.
2. Mount wing bolt-on gang anchors (1 & 2) to wings of machine using 5/8" x 4" x 7 1/2" u-bolts (19) and 5/8" lock nuts (22). See gang mount layout drawing for locations. Do not tighten bolts yet, leave them loose enough for adjustment.
3. Set wing gang turnbuckles (8) to 45" (117cm) long pin to pin. Attach to bolt-on anchors with 1" x 2 5/8" head pins (18) and 1/4" x 1 1/2" cotter pin (26).
4. Set main frame gang turnbuckles (9) to 63" (162cm) long pin to pin. Attach to bolt-on anchors with 1" x 2 5/8" head pins (18) and 1/4" x 1 1/2" cotter pin (26).
5. Mount gang cylinder masts (7) in middle gang mounts using 1 1/4" x 7" long bolt (24) and 1 1/4" lock nut (25). Place turnbuckle locks (14) over turnbuckles and attach to masts with 1" x 3 1/4" head pins (17) and 1/4" x 1 1/2" cotter pins (26).

(continued on following page)

## Disc Gang Installation

(continued from previous page)

6. Hang cylinders (10-13) from masts using 1" x 3 1/4" head pins (17) and 1/4" x 1 1/2" cotter pins (26). Cylinder locations are shown on gang layout drawing and gang cylinder hydraulic layout. **Make sure the cylinders are in the proper order across the machine.**

The gang cylinder hoses can be connected at this time following the gang cylinder hydraulic layout.

7. Attach gang mount sub-frames (6) to bolt-on gang mounts using 1 1/4" x 7" bolts (24) and 1 1/4" lock nuts (25).

8. Mount cylinder lugs (5) to sub-frames with 5/8" x 4" x 4 1/2" u-bolts (23) and 5/8" lock nuts (22). Do not tighten bolts yet, leave them loose enough for adjustment.

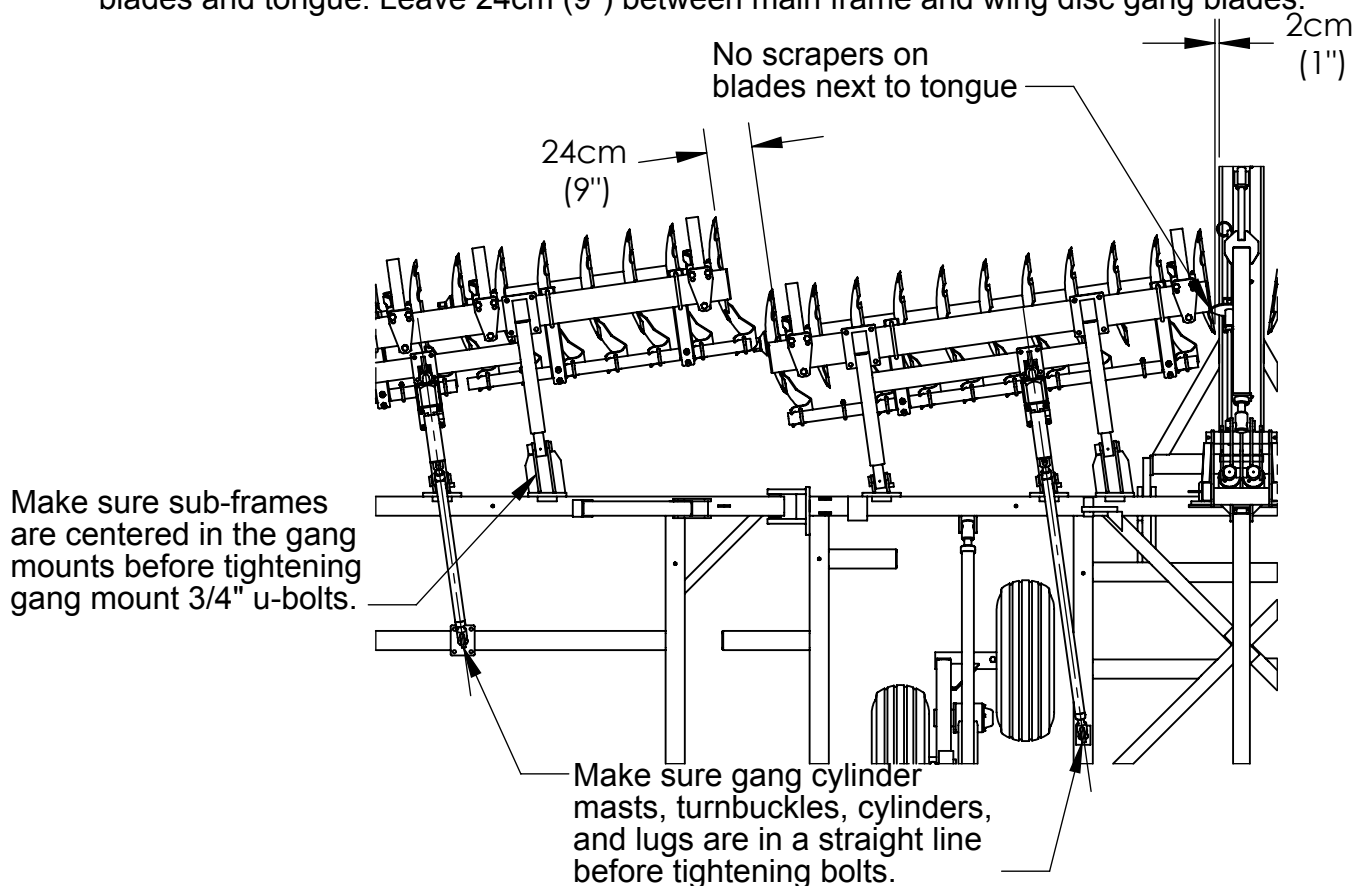
9. Attach rod end of cylinders to cylinder lugs with 1" x 3 1/4" head pins (17) and 1/4" x 1 1/2" cotter pins (26).

10. Make sure sub-frames are centered in the gang mounts and then tighten gang mount 3/4" u-bolts.

11. Make sure gang cylinder masts, turnbuckles, cylinders, and lugs are in a straight line then finish tightening all bolts.

12. Assemble disc gangs on gang tubes (see instructions on following page) and mount to sub-frames using 3/4" x 6" x 6 1/2" u-bolts (20) and 3/4" lock nuts (21). Do not tighten bolts yet, leave them loose enough for adjustment. Now attach scrapers to disc gangs.

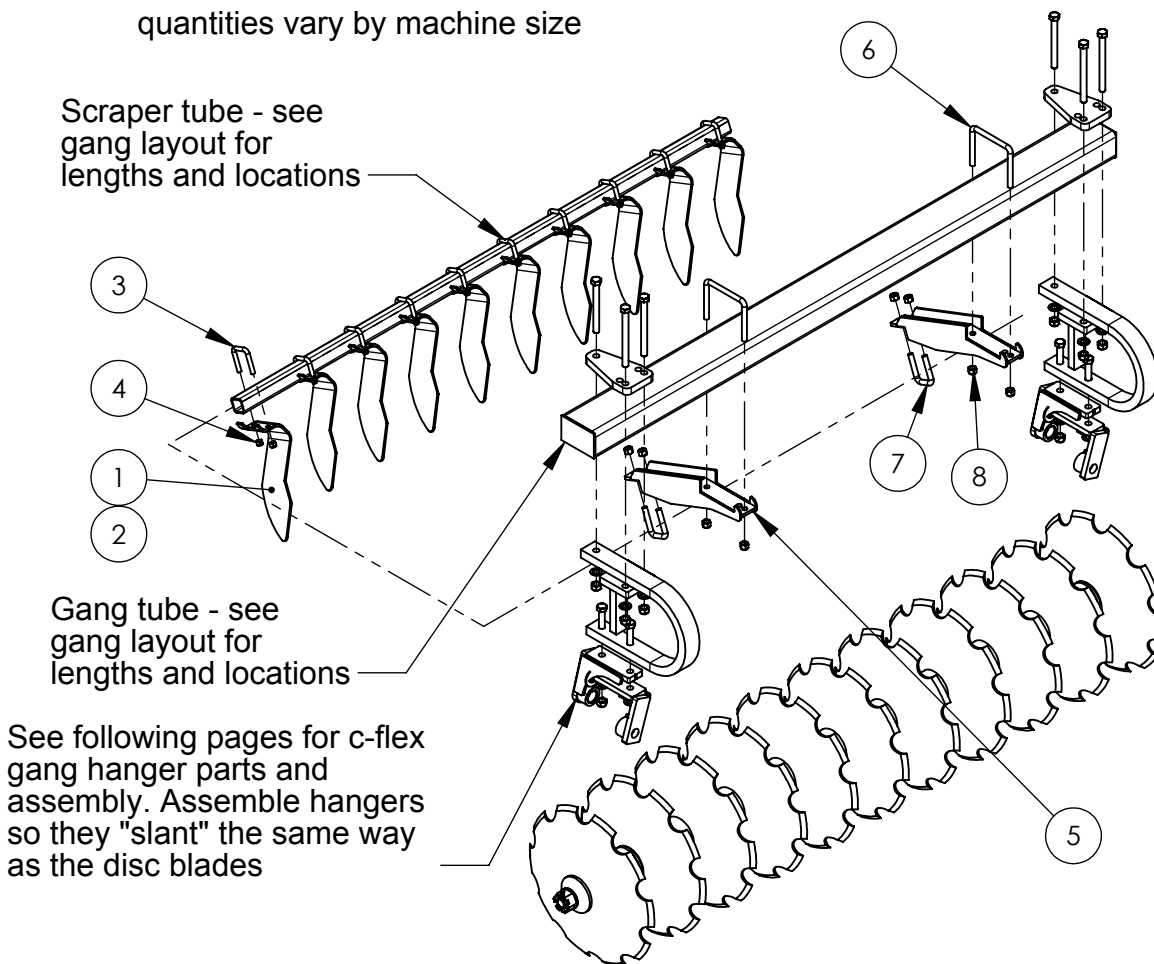
13. Adjust disc gang positions and tighten all bolts. Leave 2.5cm (1") between disc blades and tongue. Leave 24cm (9") between main frame and wing disc gang blades.



## Disc Gang Assembly and Scraper Installation

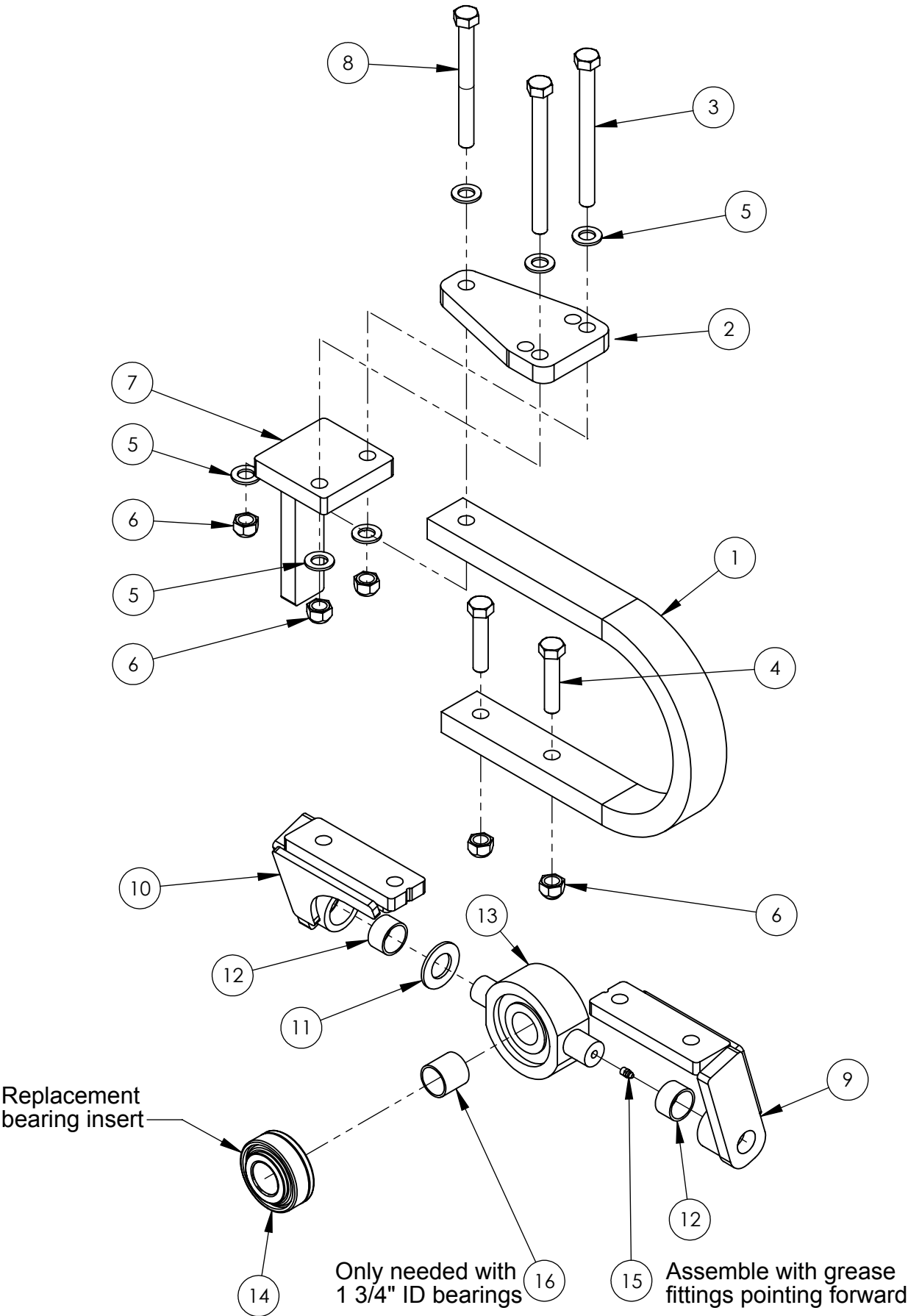
| ITEM NO. | PART NO. | DESCRIPTION                |
|----------|----------|----------------------------|
| 1        | D10018R  | DISC SCRAPER BLADE - RIGHT |
| 2        | D10018L  | DISC SCRAPER BLADE - LEFT  |
| 3        | BU0820   | 1/2" x 2 x 3 U-BOLT        |
| 4        | BN08L    | 1/2" NYLOCK NUT NC         |
| 5        | D10042   | DISC SCRAPER HANGER        |
| 6        | BU1061   | U-BOLT 5/8" x 6" x 5 1/2"  |
| 7        | BU1020   | 5/8" x 2 x 3 1/2" U-BOLT   |
| 8        | BN10L    | 5/8" NYLOCK NUT NC         |

quantities vary by machine size



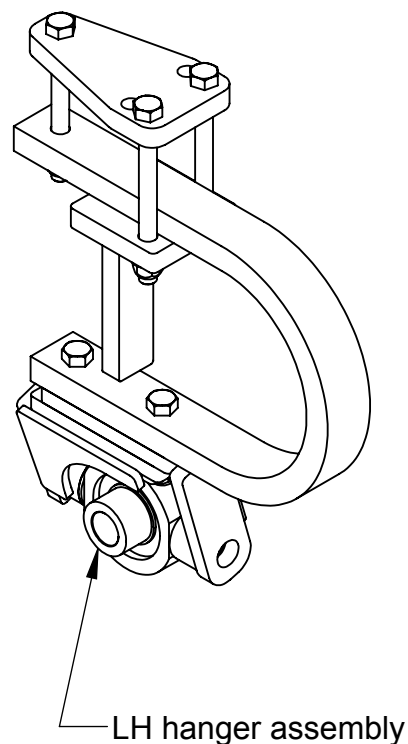
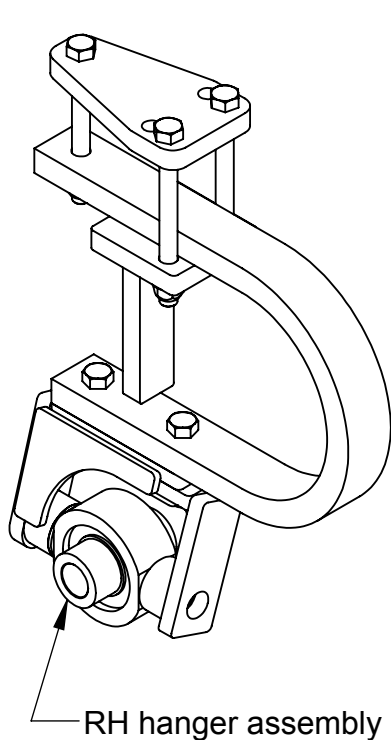
1. Assemble the gang hangers as shown on the following pages and mount gangs to gang tubes. See gang layout drawing for gang tube lengths and locations.
2. Mount gang tubes to gang mount sub-frames before attaching scrapers.
3. Attach the scraper mounts (4) to the gang tubes 5/8" x 6" x 5 1/2" u-bolts (5) and 5/8" lock nuts (7). See gang layout drawing for scraper mount locations.
5. Mount scraper tubes to mounts using 5/8" x 2" x 3 1/2" u-bolts (6) and 5/8" lock nuts (7). See gang layout drawing for scraper tube lengths and locations.
6. Attach scrapers (1) to scraper tubes using 1/2" x 2" x 3" u-bolts (2) and 1/2" lock nuts (3). Note: there are no scrapers on the blades next to the tongue.

# C-Flex Gang Hanger Assembly



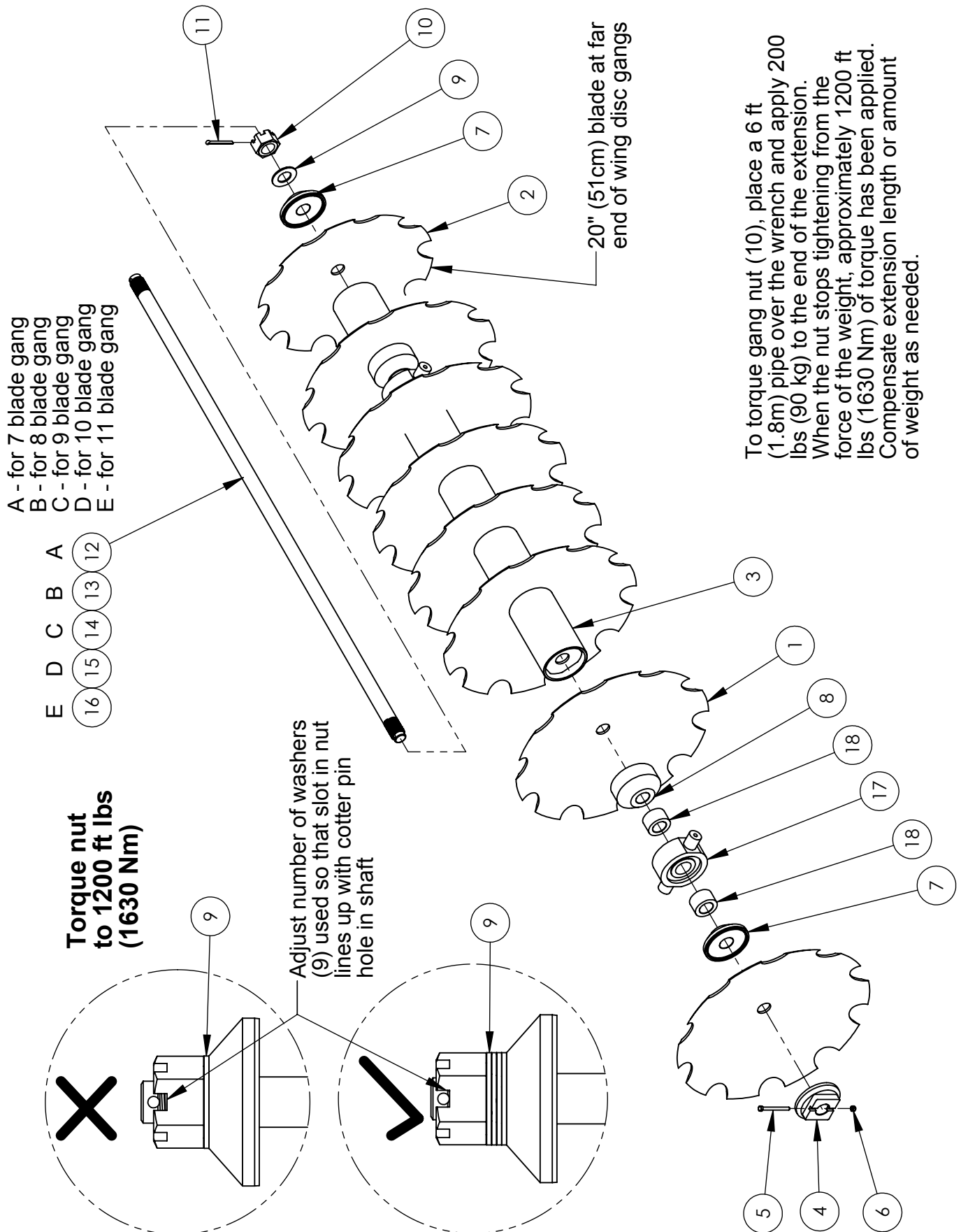
## C-Flex Gang Hanger Assembly

| ITEM NO. | QTY | PART NUMBER  | DESCRIPTION                               |
|----------|-----|--------------|-------------------------------------------|
| 1        | 1   | D10023       | 1 1/4" C-FLEX SPRING                      |
| 2        | 1   | L00676       | C-FLEX GANG MOUNTING TUBE PLATES          |
| 3        | 2   | B1285        | 3/4"NC x 8 1/2" LG. HEX BOLT GR.5         |
| 4        | 2   | B1235        | 3/4 x 3 1/2" GR.5 HEX BOLT PLATED         |
| 5        | 6   | BF12HS       | 3/4" HARD STRUCTURAL WASHER               |
| 6        | 5   | BN12S        | 3/4" STOVER LOCK NUT                      |
| 7        | 1   | D10034       | 2 1/4" C-FLEX PULL-UP PLATE WITH STOPPER  |
| 8        | 1   | B1275        | 3/4"NC x 7 1/2" LG. HEX BOLT GR. 5        |
| 9        | 1   | D00071       | 1 1/2" TRUNNION BEARING MOUNT - UPPER     |
| 10       | 1   | D00072       | 1 1/2" TRUNNION BEARING MOUNT - LOWER     |
| 11       | 1   | BF20HS       | 1 1/4" HARD STRUCTURAL WASHER             |
| 12       | 2   | GBB175150100 | 1 3/4" x 1 1/2" x 1" LG. HARD BUSHING     |
| 13       | 1   | DGW211A      | 1 3/4" ID TRUNNION BEARING ASSEMBLY       |
| 14       | 1   | DGW211APP25  | 1 3/4" ID TRUNNION BEARING INSERT         |
| 15       | 1   | GF1610       | 1/8" NPT GREASE FITTING                   |
| 16       | 1   | ZD171190     | 1 3/4" OD x 1 1/2" ID x 1 5/8" LG. SLEEVE |



The same parts can be assembled for LH or RH hangers.

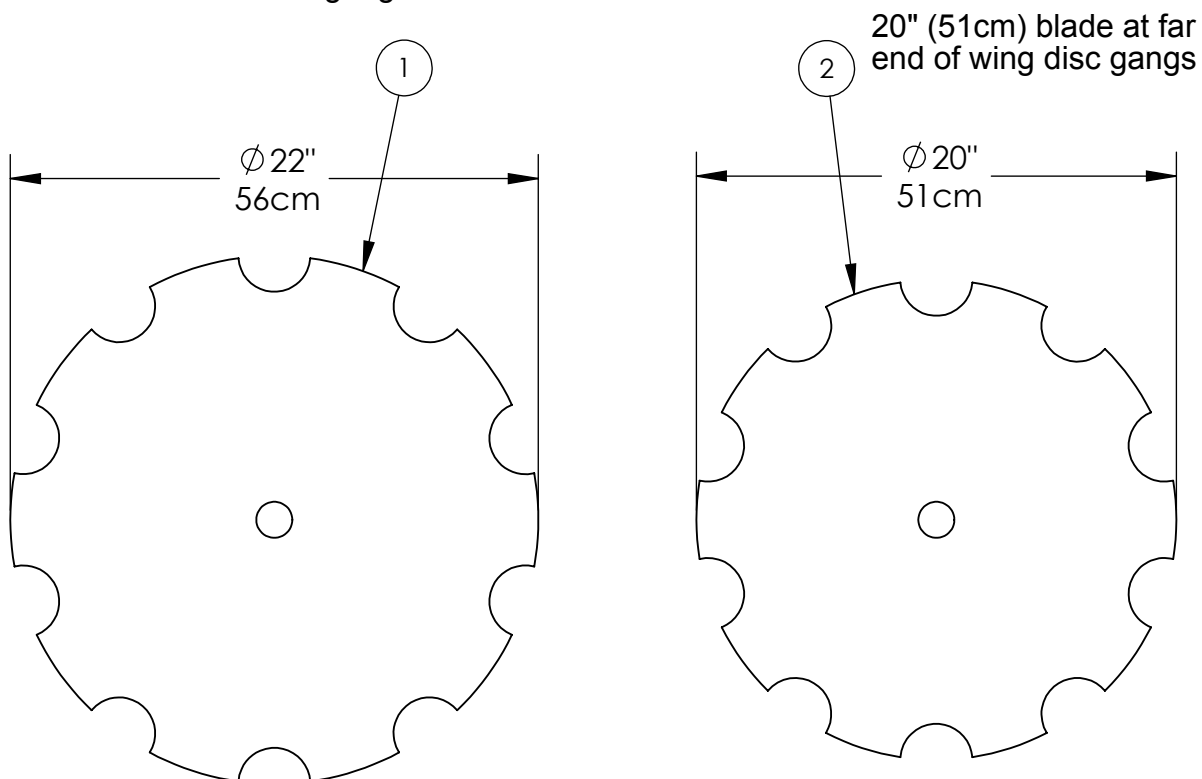
## Disc Gang Parts



## Disc Gang Parts

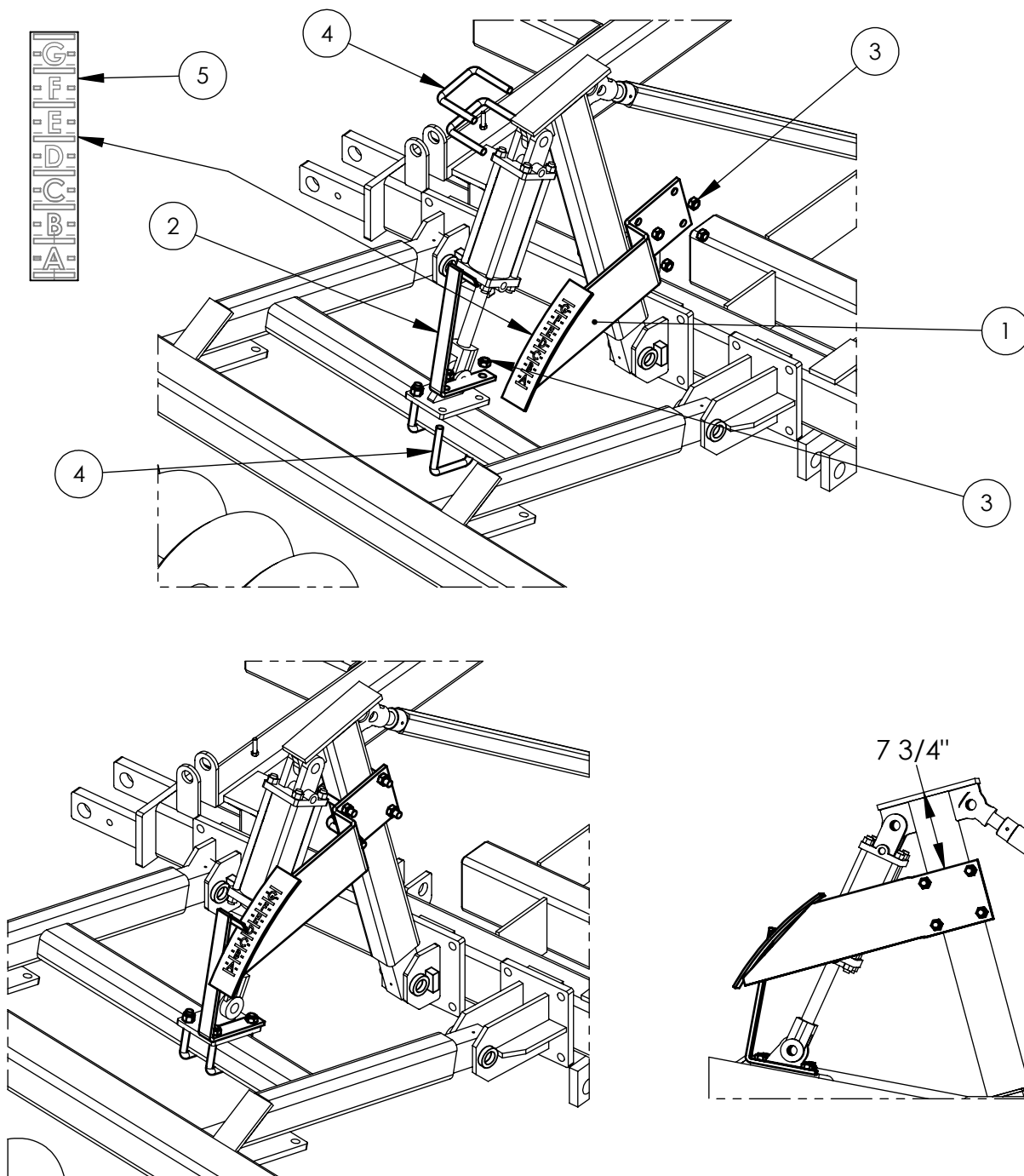
| ITEM NO. | PART NO. | DESCRIPTION                                 |
|----------|----------|---------------------------------------------|
| 1        | CT5030   | 22" x 6.5mm NOTCHED CURVED BLADE            |
| 2        | CT5028   | 20" x 5mm NOTCHED CURVED BLADE              |
| 3        | D20005   | SPOOL 9" x 5" DIA                           |
| 4        | 1916     | 5" x 1 1/2" SPACER END STOP                 |
| 5        | B0535H   | 5/16"NC x 3 1/2" LG. HEX BOLT GR. 8         |
| 6        | BN05L    | 5/16" LOCK NUT                              |
| 7        | 1463     | 5" x 1 1/2" SPACER CONCAVE                  |
| 8        | 1466     | 5 X 2 5/8" SPACER CONVEX                    |
| 9        | BF22S    | 1 3/8" HARDENED STRUCTURAL WASHER           |
| 10       | BN24S    | 1 1/2" SLOTTED HEX NUT NC GR5               |
| 11       | BSC0530  | 5/16" x 3" COTTER PIN                       |
| A        | 12       | DK24059 1 1/2" DIA. DISC SHAFT - 59" LG.    |
| B        | 13       | DK24068 1 1/2" DIA. DISC SHAFT - 68" LG.    |
| C        | 14       | DK24077 1 1/2" DIA. DISC SHAFT - 77" LG.    |
| D        | 15       | DK24086 1 1/2" DIA. DISC SHAFT - 86" LG.    |
| E        | 16       | DK24095 1 1/2" DIA. DISC SHAFT - 95" LG.    |
|          | 17       | DGW211A 1 3/4" ID TRUNNION BEARING ASSEMBLY |
|          | 18       | ZD251008 2 1/2 OD X 1 1/2 LG SPACER         |

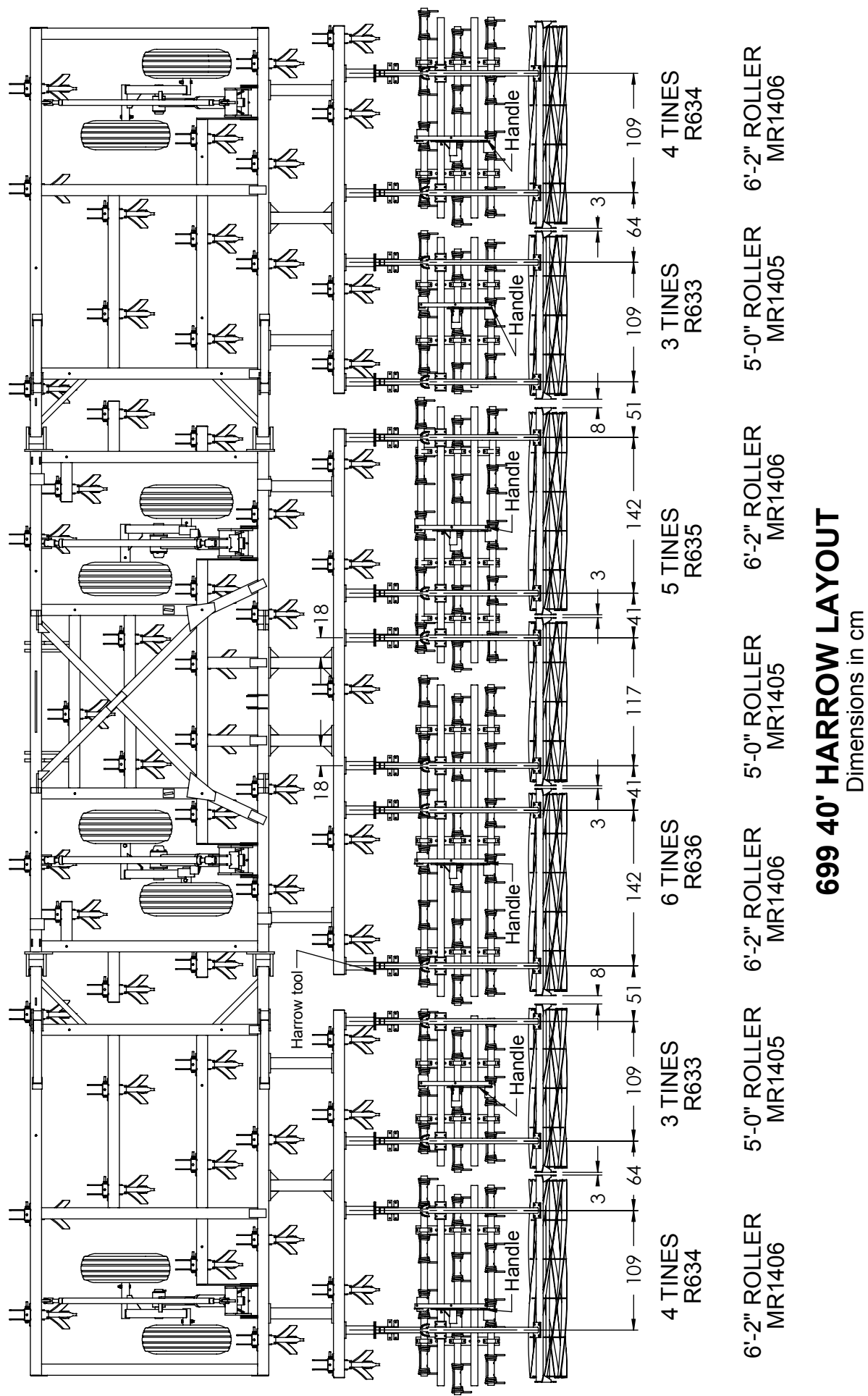
A - for 7 blade gang  
 B - for 8 blade gang  
 C - for 9 blade gang  
 D - for 10 blade gang  
 E - for 11 blade gang



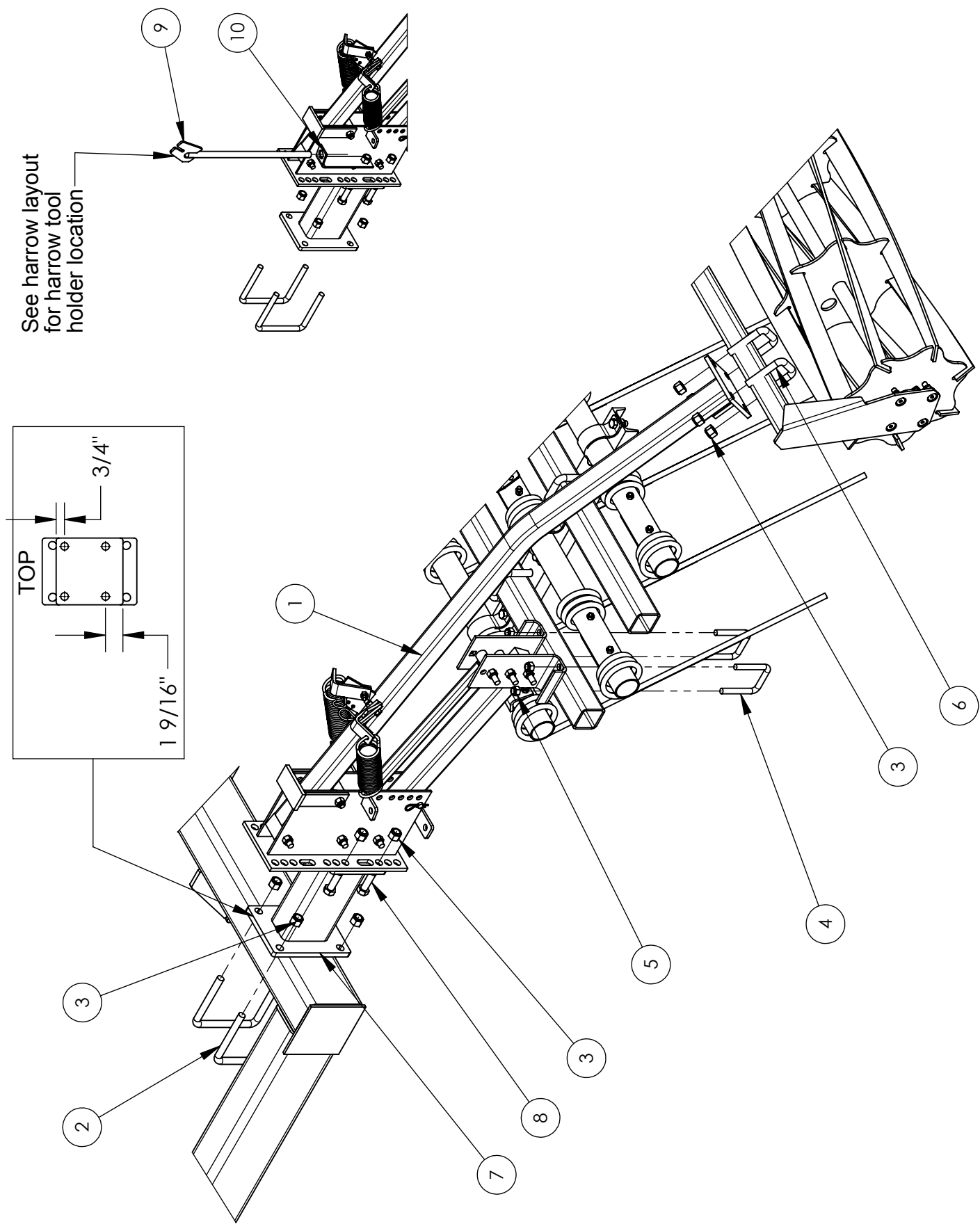
## Disc Gang Depth Indicator

| ITEM NO. | QTY. | PART NO. | DESCRIPTION                    |
|----------|------|----------|--------------------------------|
| 1        | 1    | C10971   | 699 GANG DEPTH POINTER BRACKET |
| 2        | 1    | C10972   | 699 GANG DEPTH POINTER         |
| 3        | 6    | BN10S    | 5/8" NC STOVER LOCK NUT        |
| 4        | 4    | BU1043   | U-BOLT 5/8" x 4" x 4 1/2"      |
| 5        | 1    | GD120    | GANG DEPTH GAUGE DECAL         |





# Harrow Installation



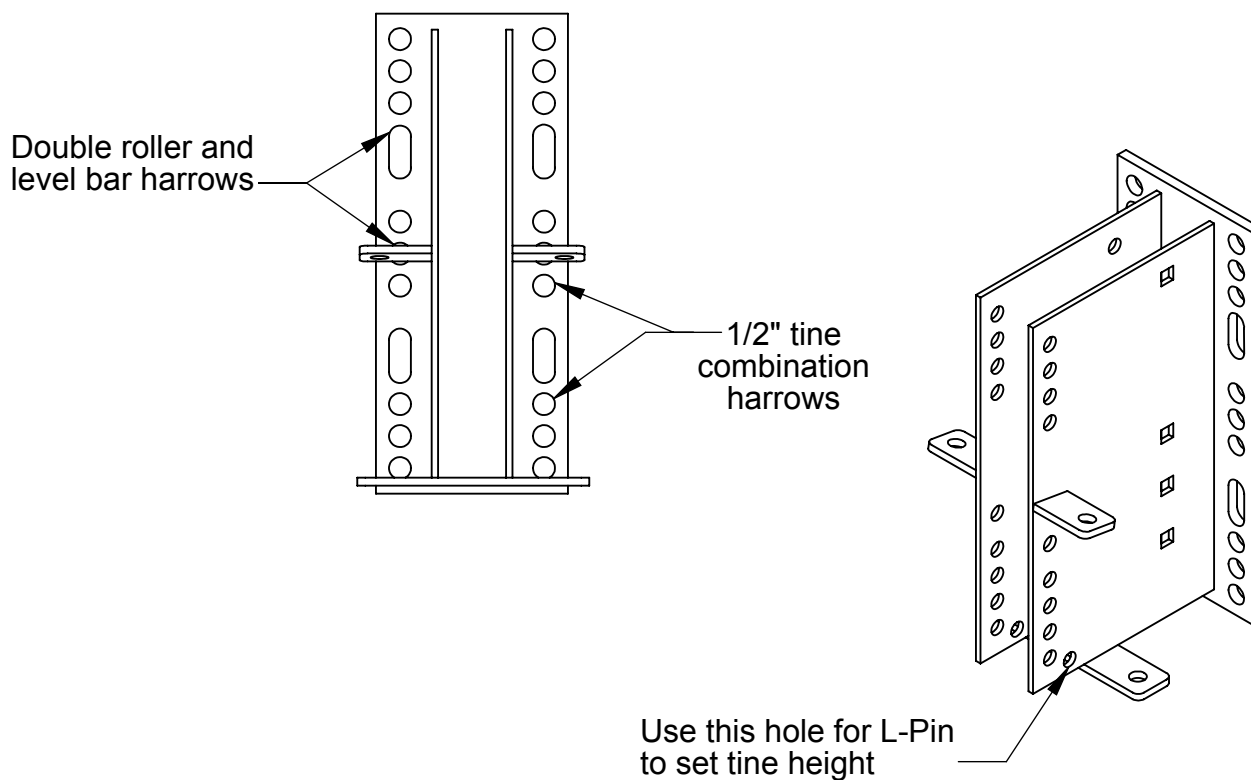
## Harrow Installation

| ITEM NO. | PART NUMBER | DESCRIPTION                 |
|----------|-------------|-----------------------------|
| 1        | RB1091      | 62" HARROW ARM ASSEMBLY     |
| 2        | BU1061      | U-BOLT 5/8" x 6" x 5 1/2"   |
| 3        | BN10L       | 5/8" NYLOCK NUT NC          |
| 4        | BU0825      | 1/2" x 2 1/2 x 3 1/2 U-BOLT |
| 5        | BN08L       | 1/2" NYLOCK NUT NC          |
| 6        | BU1020      | 5/8" x 2 x 3 1/2" U-BOLT    |
| 7        | R80034      | 10" EXTENSION               |
| 8        | B1020       | 5/8 X 2" BOLT GR. 5 PLATED  |
| 9        | RB0025      | TOOL,HARROW TIGHTENER       |
| 10       | RB0026      | HOLDER,HARROW TOOL          |

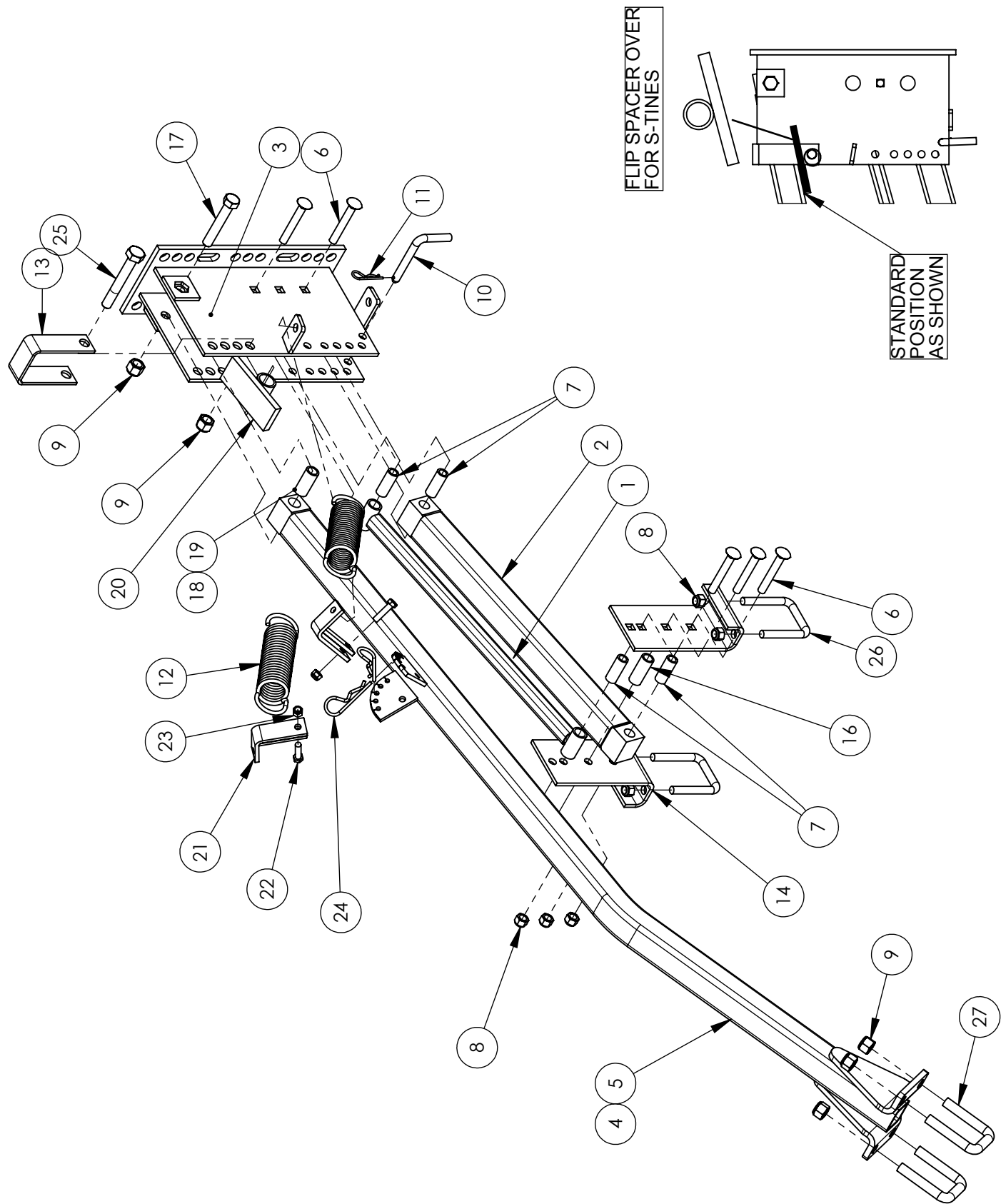
Mount harrow tool holder between plate and nut on leftmost head on the main frame (see layout for location). Harrow tool sits in holder.

Leave 3-4" between rollers on wings and rollers on main frame, and leave 1-2" between all other rollers.

### Hole settings for harrow heads to extensions



# 62 Inch Long Harrow Arm Assembly



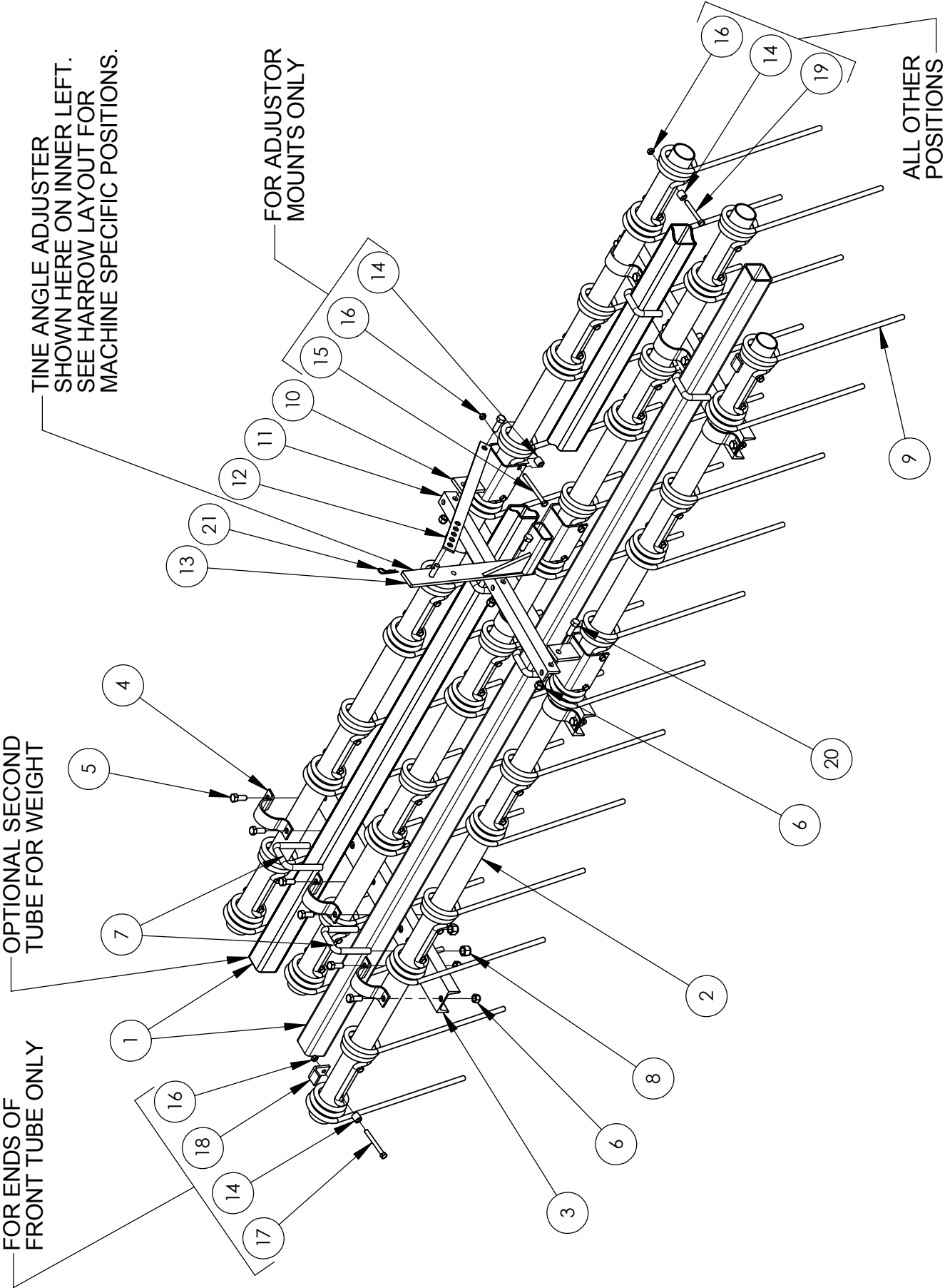
## 62 Inch Long Harrow Arm Assembly

| ITEM NO. | QTY. | PART NO.     | DESCRIPTION                                               |
|----------|------|--------------|-----------------------------------------------------------|
| 1        | 1    | R30012       | PARALLEL LINKAGE BAR                                      |
| 2        | 1    | R30006       | PARALLEL LINKAGE ARM                                      |
| 3        | 1    | R80099       | HEAD,SALFORD HARROW FOR 5/8" UPPER PIVOT BOLT             |
| 4        | 1    | R80100       | 62" HARROW ARM FOR 5/8" PIVOT AND U-BOLTS                 |
| 5        | 1    | R80100A      | 62" HARROW ARM W/ KIT (REPLACES RB1125)                   |
| 6        | 5    | BC0835H      | 1/2" X 13NC X 3-1/2" LG. CARRIAGE BOLT GR. 5 SHORT THREAD |
| 7        | 4    | R0030        | NYLON BUSHING 3/4" OD x 1/2" ID x 1.94 LG.                |
| 8        | 9    | BN08L        | 1/2" NYLOCK NUT NC                                        |
| 9        | 6    | BN10L        | 5/8" NYLOCK NUT NC                                        |
| 10       | 1    | GP0800312L03 | 1/2" x 3 1/2" PARKING STAND PIN                           |
| 11       | 1    | GHP11        | #11 HAIR PIN                                              |
| 12       | 2    | R0035        | 2" x 10" HARROW ARM SPRING                                |
| 13       | 1    | R80128       | ROLLER ARM STOP BRACKET (LONG)                            |
| 14       | 1    | R80037L      | TINE SECTION UPRIGHT PLATE LEFT                           |
| 15       | 1    | R80037R      | TINE SECTION UPRIGHT PLATE RIGHT                          |
| 16       | 1    | R0028        | STEEL HEAD SPACER 2 1/8" LG.                              |
| 17       | 2    | B1037ST      | 5/8" - 11NC X 3 3/4" SHORT THREAD BOLT                    |
| 18       | 1    | R80098       | 7/8"OD NYLATRON BUSHING                                   |
| 19       | 1    | R80106       | 7/8"OD - 0.520"ID NYLATRON ROD                            |
| 20       | 1    | R80096       | HARROW ARM SPACER                                         |
| 21       | 2    | RB0021       | TIGHTENER,SINGLE SPRING                                   |
| 22       | 2    | B0615        | 3/8" X 1 1/2" LG. GRADE 5                                 |
| 23       | 2    | BN06L        | 3/8"-16NC LOCK NUT                                        |
| 24       | 2    | GHP9         | #9 HAIR PIN                                               |
| 25       | 1    | B1045        | 5/8 x 4 1/2" HEX BOLT GR 5                                |
| 26       | 2    | BU0825       | 1/2" x 2 1/2 x 3 1/2 U-BOLT                               |
| 27       | 2    | BU1020       | 5/8" x 2 x 3 1/2" U-BOLT                                  |

### NOTES:

+ + USE R80130 FOR S-TINE CULTIVATORS

# 1/2" Tine Harrow Assemblies



## 1/2" Tine Harrow Assemblies

### 1/2" - 3 TINE HARROW ASSEMBLY PART NO. R633

| ITEM NO. | PART NO.   | DESCRIPTION                           |
|----------|------------|---------------------------------------|
| 1        | U252503054 | TUBE 2 1/2 x 2 1/2 x 3/16"W x 54" LG. |
| 2        | R6063      | TINE PIPE FOR 1/2" (3-TINE)           |

### 1/2" - 4 TINE HARROW ASSEMBLY PART NO. R634

| ITEM NO. | PART NO.   | DESCRIPTION                           |
|----------|------------|---------------------------------------|
| 1        | U252503072 | TUBE 2 1/2 x 2 1/2 x 3/16"W x 72" LG. |
| 2        | R6064      | TINE PIPE FOR 1/2" (4-TINE)           |

### 1/2" - 5 TINE HARROW ASSEMBLY PART NO. R635

| ITEM NO. | PART NO.   | DESCRIPTION                           |
|----------|------------|---------------------------------------|
| 1        | U252503092 | TUBE 2 1/2 x 2 1/2 x 3/16"W x 92" LG. |
| 2        | R6065      | TINE PIPE FOR 1/2" (5-TINE)           |

### 1/2" - 6 TINE HARROW ASSEMBLY PART NO. R636

| ITEM NO. | PART NO.   | DESCRIPTION                            |
|----------|------------|----------------------------------------|
| 1        | U252503112 | TUBE 2 1/2 x 2 1/2 x 3/16"W x 112" LG. |
| 2        | R6066      | TINE PIPE FOR 1/2" (6-TINE)            |

## COMMON PARTS

| ITEM NO. | PART NO. | DESCRIPTION                         |
|----------|----------|-------------------------------------|
| 3        | R30002   | 1/2" TINE TUBE CONNECTOR            |
| 4        | R30011   | CLAMP BRACKET                       |
| 5        | B0812    | 1/2 X 1 1/4" BOLT                   |
| 6        | BN08L    | 1/2" NYLOCK NUT NC                  |
| 7        | BU1025   | U-BOLT 5/8" x 2 1/2" x 4"           |
| 8        | BN10L    | 5/8" NYLOCK NUT NC                  |
| 9        | R60000   | 1/2" WIRE - 20" DBL LEG SPRING TINE |
| 10       | R30007   | ADJUSTING BRACKET WELDMENT          |
| 11       | R30005   | 1/2" TINE 3 BAR ADJUST CONNECTOR    |
| 12       | R30010   | ADJUSTING BAR HD 3 BAR TINE         |
| 13       | R30008   | ADJUSTING BRACKET HANDLE WELDMENT   |
| 14       | R9063    | .75 OD x .438 ID X 3/4 LONG SPACER  |
| 15       | B0640    | 3/8"NC x 4" LG. HEX BOLT            |
| 16       | BN06S    | 3/8"-16NC STOVER LOCK NUT           |
| 17       | B0635    | 3/8"NC x 3 1/2" LG. HEX BOLT        |
| 18       | R30015   | LIGHT SAVER BRACKET                 |
| 19       | B0630    | 3/8"NC x 3" HEX BOLT                |
| 20       | B0815    | 1/2" x 1 1/2" HEX BOLT              |
| 21       | GHP11    | #11 HAIR PIN                        |



## 14" Roller Harrow Assemblies

### 14" ROLLER HARROW ASSEMBLY - 3' 0" (91.4) LONG

COMPLETE ASSEMBLY PART NO. MR80143(L/R)

| ITEM NO. | QTY. | PART NO. | DESCRIPTION                                |
|----------|------|----------|--------------------------------------------|
| 1        | 1    | R80147R  | 3' ROLLER ONLY RIGHT HAND SPIRAL, 14" DIA. |
| 2        | 1    | R80137-3 | 3' ROLLER FRAME FOR 14" ROLLER             |
| 3        | 2    | A60099   | 1 1/4" x 1 1/2" x 1 19/32" LG BUSHING      |
| 4        | 2    | GB491-B  | 1 1/2" BEARING COMPLETE                    |
| 5        | 2    | BN20JL   | 1 1/4" NC JAM LOCK NUT                     |
| 6        | 6    | BC0812H  | CARRIAGE BOLT 1/2" NC x 1 1/4" LG. GR. 5   |
| 7        | 6    | BN08S    | 1/2"-13NC STOVER LOCK NUT                  |

### 14" ROLLER HARROW ASSEMBLY - 4' 0" (121.9) LONG

COMPLETE ASSEMBLY PART NO. MR80144(L/R)

| ITEM NO. | QTY. | PART NO. | DESCRIPTION                                |
|----------|------|----------|--------------------------------------------|
| 1        | 1    | R80148R  | 4' ROLLER ONLY RIGHT HAND SPIRAL, 14" DIA. |
| 2        | 1    | R80137-4 | 4' ROLLER FRAME FOR 14" ROLLER             |
| 3        | 2    | A60099   | 1 1/4" x 1 1/2" x 1 19/32" LG BUSHING      |
| 4        | 2    | GB491-B  | 1 1/2" BEARING COMPLETE                    |
| 5        | 2    | BN20JL   | 1 1/4" NC JAM LOCK NUT                     |
| 6        | 6    | BC0812H  | CARRIAGE BOLT 1/2" NC x 1 1/4" LG. GR. 5   |
| 7        | 6    | BN08S    | 1/2"-13NC STOVER LOCK NUT                  |

### 14" ROLLER HARROW ASSEMBLY - 5' 0" (152.4) LONG

COMPLETE ASSEMBLY PART NO. MR80145(L/R)

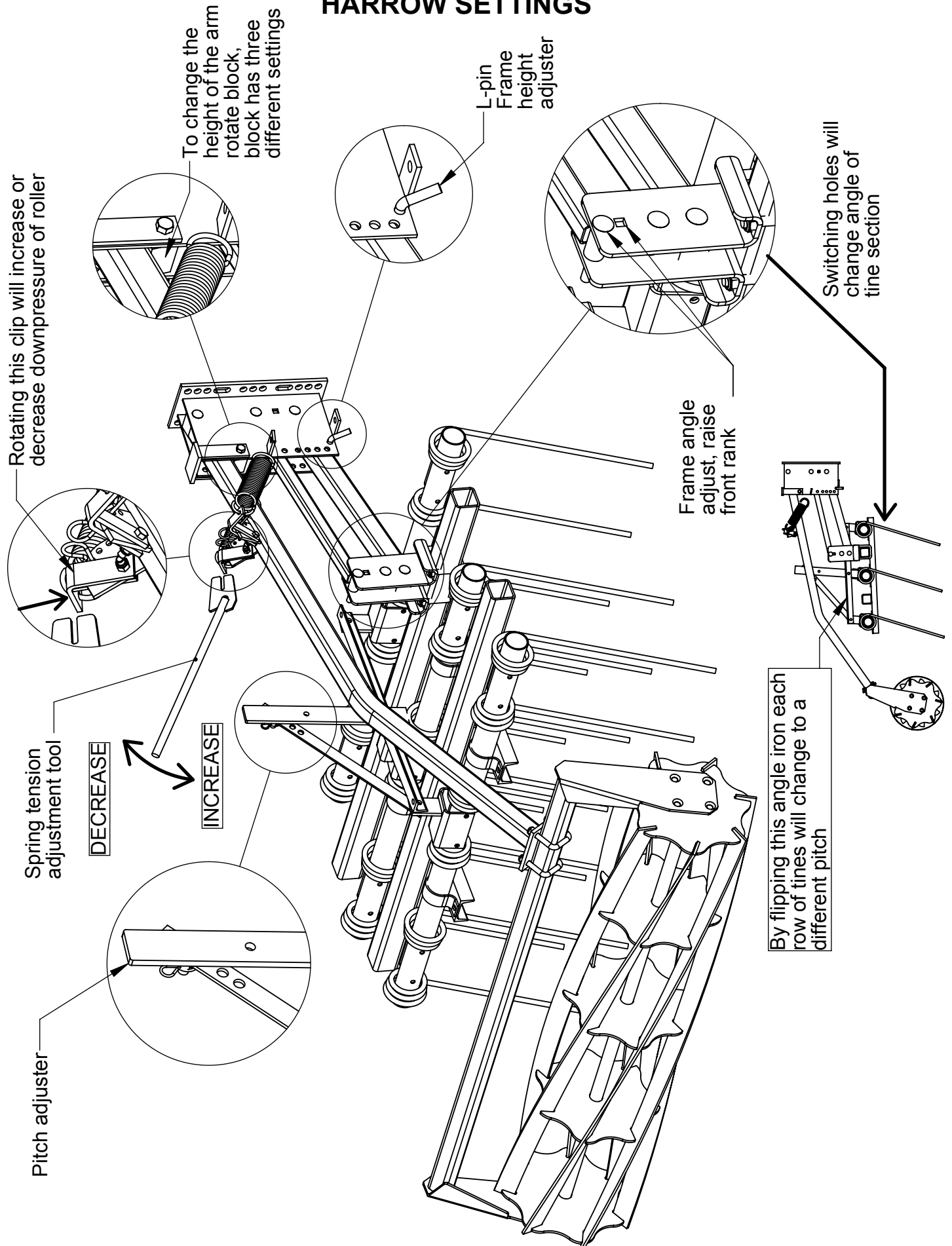
| ITEM NO. | QTY. | PART NO. | DESCRIPTION                                |
|----------|------|----------|--------------------------------------------|
| 1        | 1    | R80149R  | 5' ROLLER ONLY RIGHT HAND SPIRAL, 14" DIA. |
| 2        | 1    | R80137-5 | 5' ROLLER FRAME FOR 14" ROLLER             |
| 3        | 2    | A60099   | 1 1/4" x 1 1/2" x 1 19/32" LG BUSHING      |
| 4        | 2    | GB491-B  | 1 1/2" BEARING COMPLETE                    |
| 5        | 2    | BN20JL   | 1 1/4" NC JAM LOCK NUT                     |
| 6        | 6    | BC0812H  | CARRIAGE BOLT 1/2" NC x 1 1/4" LG. GR. 5   |
| 7        | 6    | BN08S    | 1/2"-13NC STOVER LOCK NUT                  |

### 14" ROLLER HARROW ASSEMBLY - 6' 2" (187.9) LONG

COMPLETE ASSEMBLY PART NO. MR80146(L/R)

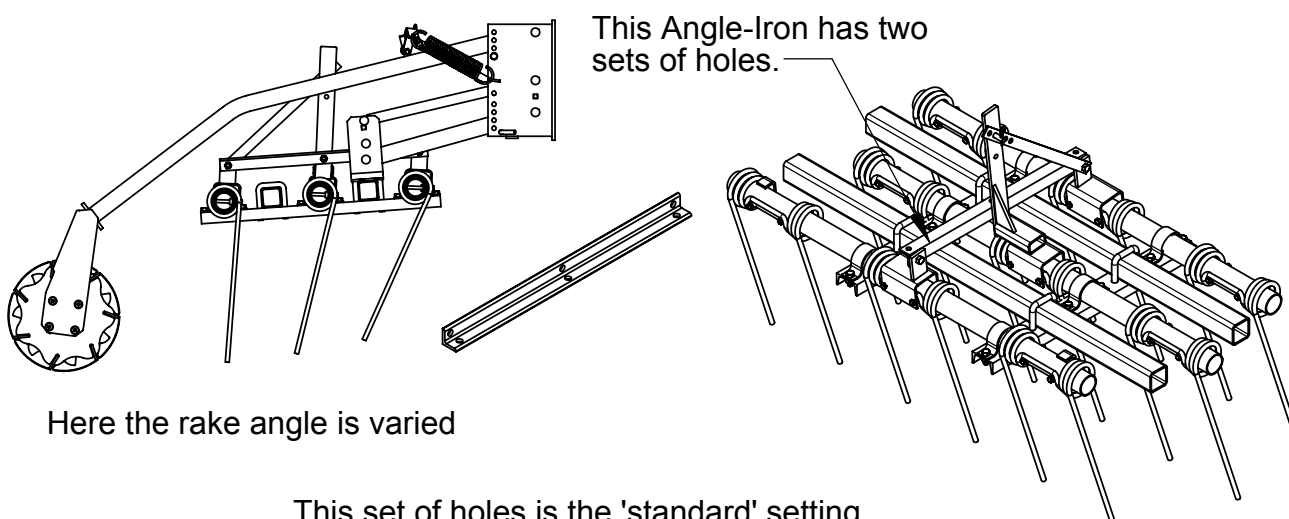
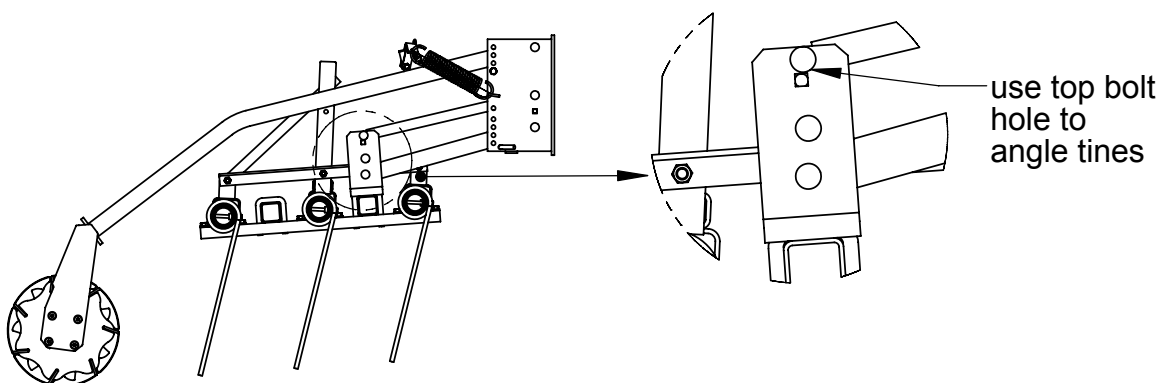
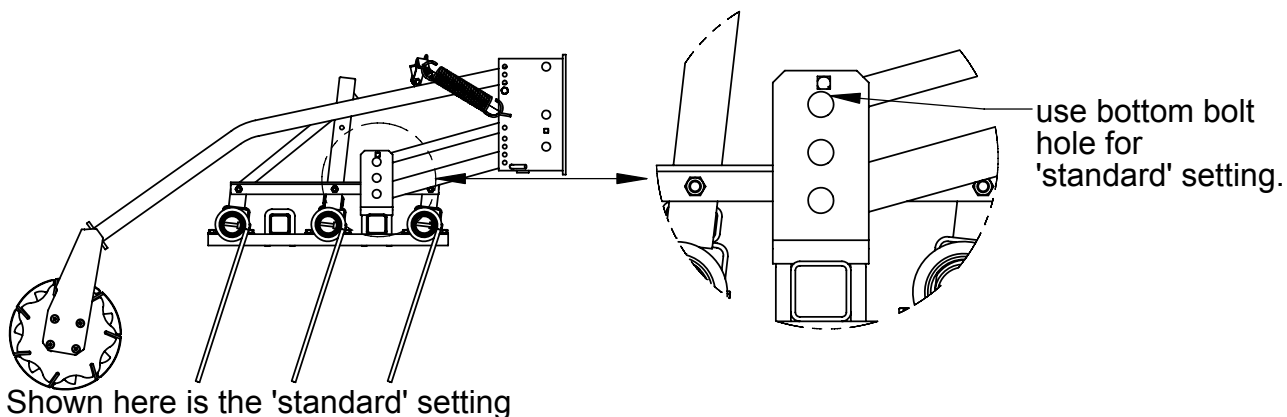
| ITEM NO. | QTY. | PART NO. | DESCRIPTION                                  |
|----------|------|----------|----------------------------------------------|
| 1        | 1    | R80150R  | 6'2" ROLLER ONLY RIGHT HAND SPIRAL, 14" DIA. |
| 2        | 1    | R80137-6 | 6'2" ROLLER FRAME FOR 14" ROLLER             |
| 3        | 2    | A60099   | 1 1/4" x 1 1/2" x 1 19/32" LG BUSHING        |
| 4        | 2    | GB491-B  | 1 1/2" BEARING COMPLETE                      |
| 5        | 2    | BN20JL   | 1 1/4" NC JAM LOCK NUT                       |
| 6        | 6    | BC0812H  | CARRIAGE BOLT 1/2" NC x 1 1/4" LG. GR. 5     |
| 7        | 6    | BN08S    | 1/2"-13NC STOVER LOCK NUT                    |

# HARROW SETTINGS

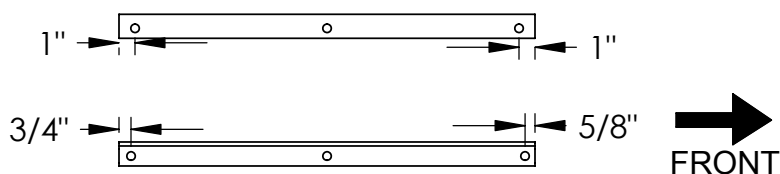


## Harrow Tine Settings

For better trash flow, the tines are adjustable in 2 ways:



This set of holes is the 'standard' setting.



Using this set of holes will vary the rake angle as shown above.



## Axle Lift Hydraulics

| LABEL | LENGTH (cm) | QTY | FROM                          | TO                            |
|-------|-------------|-----|-------------------------------|-------------------------------|
| 1A    | 716         | 1   | TRACTOR                       | STROKE CONTROL VALVE INLET    |
| 1B    | 152         | 1   | STROKE CONTROL VALVE OUTLET   | TEE AT BASE OF LEFT 40095 [A] |
| 2     | 53          | 1   | TEE AT BASE OF LEFT 40095 [A] | BASE OF RIGHT 40095 [A]       |
| 3     | 411         | 2   | ROD END 40095 [A]             | BASE 4008 [B]                 |
| 4     | 462         | 2   | ROD END 4008 [B]              | BASE 3708 [C]                 |
| 5     | 742         | 2   | ROD END 3708 [C]              | RETURN TEE                    |
| 6     | 625         | 1   | RETURN TEE                    | TRACTOR                       |

| ITEM | QTY | PART NO.       | DESCRIPTION                                                                                 |
|------|-----|----------------|---------------------------------------------------------------------------------------------|
| A    | 2   | HSR40095       | 4" BORE x 9.5" STROKE RPH. HYDRAULIC CYLINDER                                               |
| B    | 2   | HSR4008        | 4" BORE x 8" STROKE RPH. HYDRAULIC CYLINDER                                                 |
| C    | 2   | HSR3708        | 3.75" BORE x 8" STROKE RPH. HYDRAULIC CYLINDER                                              |
| D    | 2   | H80104P        | 1/2" NPT MALE PIONEER COUPLER                                                               |
| E    | 13  | H951586        | -08ORB TO -06NPT SWIVEL ELBOW                                                               |
| F    | 2   | H956666        | -06NPT ALL SWIVEL TEE                                                                       |
| G    | 1   | H910066        | -06NPT TO -06NPT MALE UNION                                                                 |
| H    | 1   | H89008         | -08ORB PLUG                                                                                 |
| J    | 1   | HPMSC10        | STROKE CONTROL VALVE                                                                        |
| K    | 1   | HG-PT22E22R21R | Pair of Red Extend / Red Grey Retract plastic hose grips with 1/2 " NPT male/female fitting |
| L    | 1   | H930586        | 3/4 ORB M X 3/8F STRAIGHT SWIVEL                                                            |

### CHARGING THE CIRCUIT

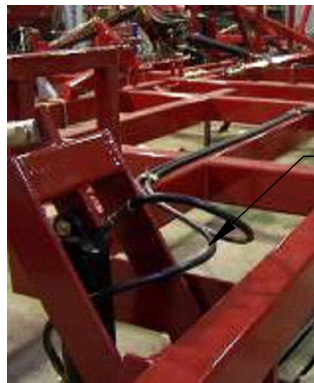
**Mount only the Barrel end of the cylinders until the circuit has been charged.**

**Connect only the hoses to the tractor until the circuit is charged. Be sure parking stand is properly engaged before beginning.**

1. Be sure that all cylinders can extend completely without striking anything
2. Connect hoses to tractor.
3. Extend cylinders slowly and hold lever for 2-3 minutes. This will purge air from the circuit (each lift cylinder has an internal valve, which allows oil to by-pass only when completely extended)
4. The circuit is now free from air. Install rod end pins and connect tongue telescope.

**DO NOT RETRACT CYLINDERS ALL THE WAY WITH THE MACHINE HITCHED TO THE TRACTOR (ON HARD GROUND). DRAWBAR MAY BE BENT UPWARDS.**

**Use tie-straps to identify the hose ends with coloured straps for quick hookup to tractor**

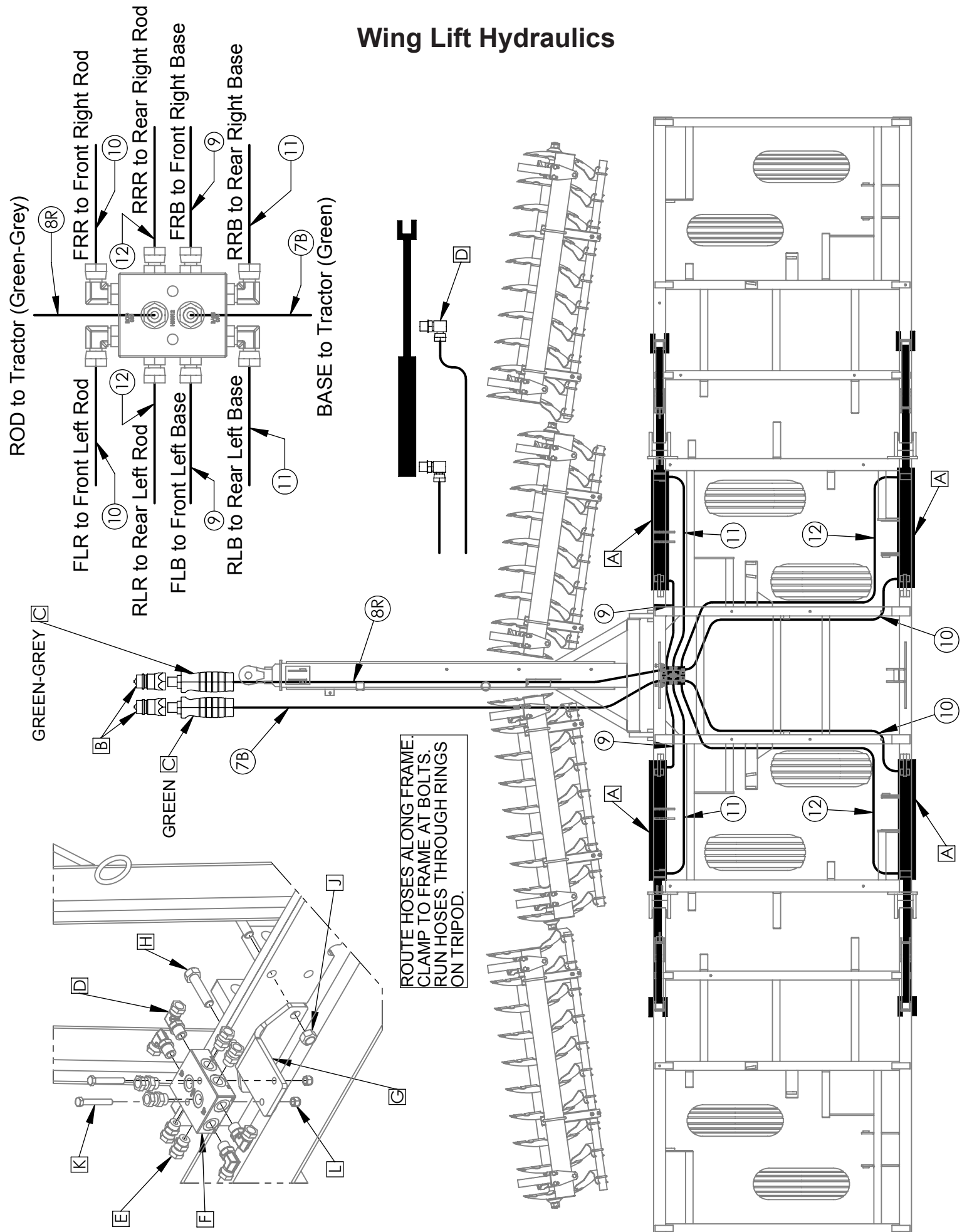


Route hoses behind axle towers



Leave a small droop of hose (3-4") across wing joint

# Wing Lift Hydraulics



## Wing Lift Hydraulics

| LABEL | QTY. | LENGTH | FROM                 | TO           | HOSE SIZE | END SIZES   |
|-------|------|--------|----------------------|--------------|-----------|-------------|
| 7B    | 1    | 20' 6" | TRACTOR (GREEN)      | MANIFOLD     | 1/2"      | 3/8" - 1/2" |
| 8R    | 1    | 20' 6" | TRACTOR (GREEN-GREY) | MANIFOLD     | 1/2"      | 3/8" - 1/2" |
| 9     | 2    | 2' 8"  | MANIFOLD             | FRONT BARREL | 3/8"      | 3/8" - 3/8" |
| 10    | 2    | 6'     | MANIFOLD             | FRONT ROD    | 3/8"      | 3/8" - 3/8" |
| 11    | 2    | 9'6"   | MANIFOLD             | REAR BARREL  | 3/8"      | 3/8" - 3/8" |
| 12    | 2    | 11' 6" | MANIFOLD             | REAR ROD     | 3/8"      | 3/8" - 3/8" |

| ITEM | QTY. | PART NO.       | DESCRIPTION                                                                                     |
|------|------|----------------|-------------------------------------------------------------------------------------------------|
| A    | 4    | HS3536         | 3 1/2" BORE x 36" STROKE HYD. CYLINDER                                                          |
| B    | 2    | H80104P        | 1/2" NPT PIONEER MALE TIP                                                                       |
| C    | 1    | HG-PT24E24R21R | PAIR OF GREEN EXTEND / GREEN-GREY RETRACT PLASTIC HOSE GRIPS WITH 1/2 " NPT MALE/FEMALE FITTING |
| D    | 12   | H951586        | 3/4" ORB M X 3/8 F 90 SWIVEL ELBOW                                                              |
| E    | 6    | H930586        | 3/4 ORB M X 3/8F STRAIGHT SWIVEL                                                                |
| F    | 1    | H00012         | 3 SECTION WING FOLDING MANIFOLD                                                                 |
| G    | 1    | A60079F        | HYDRAULIC MANIFOLD BRACKET                                                                      |
| H    | 2    | B1025          | 5/8 NC X 2 1/2" HEX BOLT GR 5 PLATED                                                            |
| J    | 2    | BN10S          | 5/8" STOVER LOCK NUT                                                                            |
| K    | 2    | B0625          | 3/8" NC X 2 1/2" HEX BOLT GR 5 PLATED                                                           |
| L    | 2    | BN06L          | 3/8" - 16 NC NYLOCK NUT                                                                         |

### CHARGING WING FOLD CYLINDERS

**IMPORTANT: Do not connect the cylinder rods until system has been charged with oil.**

1. Prop up the cylinder with a block of wood so the rod can extend without striking anything. (see Fig. 1)

2. Hitch to tractor and connect hoses. (note: check to see that all the cylinders move in the same direction. If not, then switch the rod and barrel hoses of the cylinder(s) moving backward.)

3. Extend cylinders completely. Hold lever for 30 seconds as air exits the cylinder.

4. Retract cylinders completely. Hold lever for 30 seconds.

5. Repeat three times

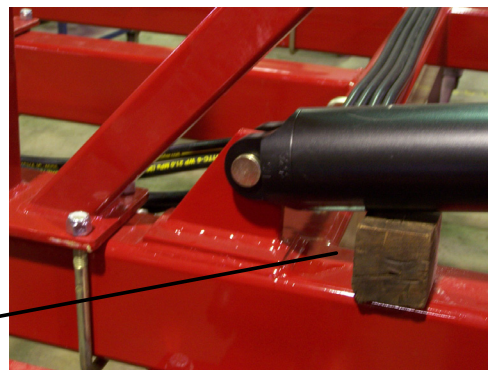
6. Install cylinder pins. Be sure washers are installed correctly (see cylinder page).

**CAUTION** 7. When folding for the first time, or when new hardware is installed, check that cylinders and fittings do not collide with the wing frame when fully folded. If so, use an alternate plug in the cylinder, or simply rotate cylinder 180 degrees.

**DANGER** **Air in the wing cylinders will cause wings to fall to the ground!!!**  
Whenever air could have entered the cylinders, repeat the process above to purge circuit.

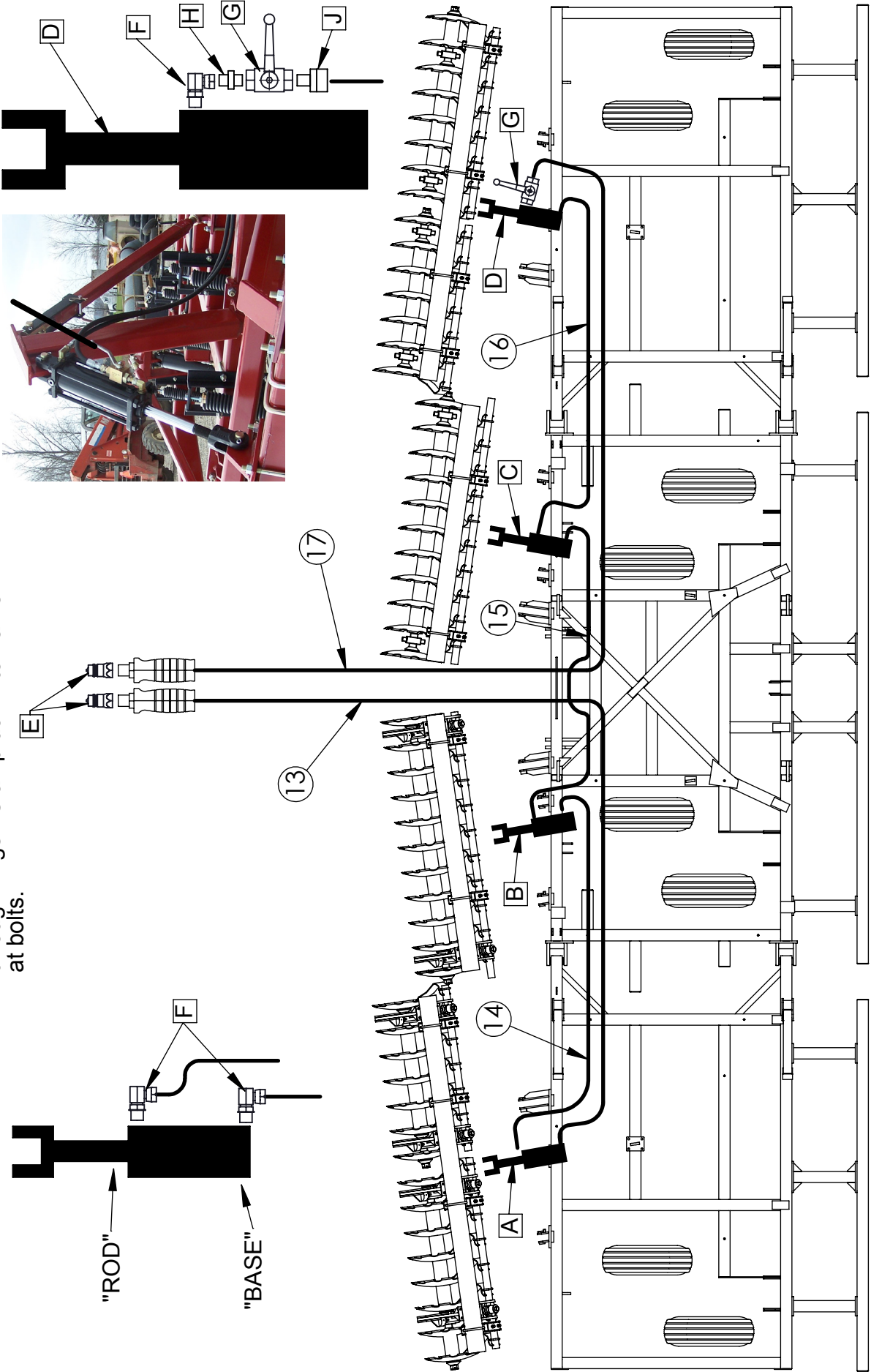
**Never work on a lift system with the wings folded!!!**  
**ALWAYS UNFOLD WINGS** before working on hydraulics!!

Fig 1. When charging the circuit, prop up cylinder with block of wood. Be sure the rod can extend freely without striking anything.



# 699 Disc Gang Hydraulics

Ball valve at rod side of cylinder.  
When in transport or storage, close valve.



## 699 Disc Gang Hydraulics

| LABEL | LENGTH<br>(cm) | FROM            | TO               |
|-------|----------------|-----------------|------------------|
| 13    | 1082           | TRACTOR         | BASE OF 4008 [A] |
| 14    | 513            | ROD OF 4008 [A] | BASE OF 3708 [B] |
| 15    | 366            | ROD OF 3708 [B] | BASE OF 3508 [C] |
| 16    | 513            | ROD AT 3508 [C] | BASE OF 3208 [D] |
| 17    | 1113           | ROD OF 3208 [D] | TRACTOR          |

| ITEM | QTY | PART NO.       | DESCRIPTION                                                                                     |
|------|-----|----------------|-------------------------------------------------------------------------------------------------|
| A    | 1   | HCR4008        | 3 1/4" BORE x 8" STROKE RPH HYDRAULIC CYLINDER                                                  |
| B    | 1   | HCR3708        | 3" BORE x 8" STROKE RPH HYDRAULIC CYLINDER                                                      |
| C    | 1   | HCR3508        | 2 3/4" BORE x 8" STROKE RPH HYDRAULIC CYLINDER                                                  |
| D    | 1   | HCR3208        | 2 1/2" BORE x 8" STROKE RPH HYDRAULIC CYLINDER                                                  |
| E    | 2   | H80104P        | COUPLER - 1/2" MALE NPT PIONEER                                                                 |
| F    | 8   | H951586        | ELBOW -08ORB TO -06F NPT SWIVEL                                                                 |
| G    | 1   | HV1130         | HAND OPERATED BALL VALVE (3/8" 2 WAY)                                                           |
| H    | 1   | H915066        | -06ORB TO -06NPT MALE                                                                           |
| J    | 1   | H930566        | -06ORB TO -06F NPT SWIVEL                                                                       |
| K    | 1   | HG-PT23E23R21R | Pair of Black Extend / Black Grey Retract plastic hose grips with 1/2 " NPT male/female fitting |

### Charging the Circuit

When first using machine, or anytime that air could have entered into the system, it is necessary to remove the air from the system.

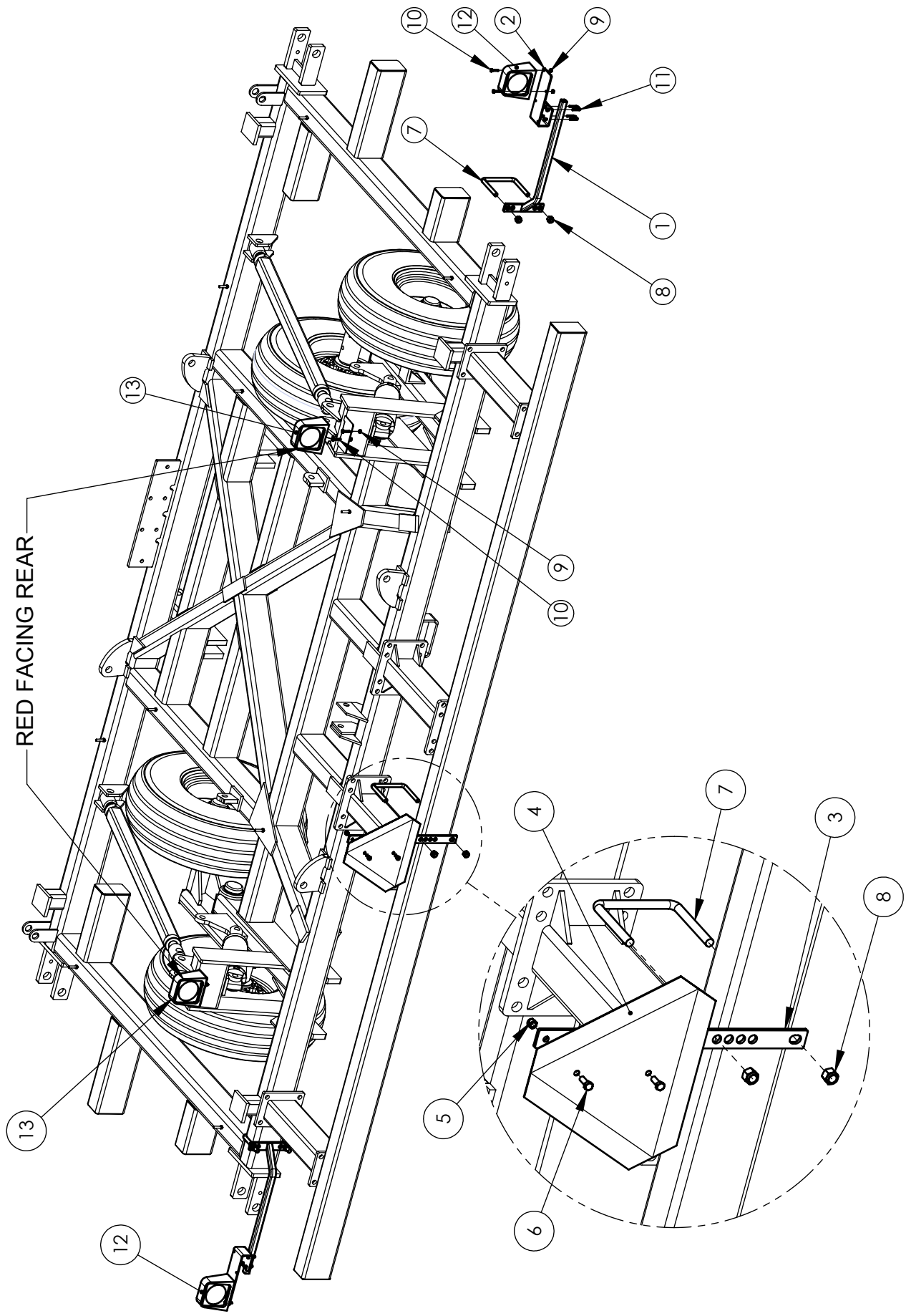
1. Connect Tractor
2. Open Ball Valve
3. Extend cylinders completely, hold lever for 3 minutes
4. Close cylinders completely.
5. Repeat steps 2 and 3 two times.

The system is now free from air.

Each disc cylinder has an internal valve, which allows oil to by-pass only when completely extended. This is called 'rephasing'. When working in the field, it may be necessary to rephase the system from time to time: Lift machine, extend discs, hold for 10 seconds.

When machine is not in use, close ball valve.

# Lights & SMV Install



## Lights & SMV Install

| ITEM | QTY | PART NO.    | DESCRIPTION                  |
|------|-----|-------------|------------------------------|
| 1    | 2   | A60054      | LIGHT BRACKET (LONG)         |
| 2    | 2   | L00425      | OUTSIDE LIGHT MOUNTING PLATE |
| 3    | 1   | C1011       | SMV MOUNTING BRACKET         |
| 4    | 1   | GAP103NS    | SMV SIGN                     |
| 5    | 2   | BN06L       | 3/8"-16NC LOCK NUT           |
| 6    | 2   | B0610       | 3/8 X 1" PLATED BOLT GR.5    |
| 7    | 3   | BU1061      | U-BOLT 5/8" x 6" x 5 1/2"    |
| 8    | 6   | BN10L       | 5/8" NYLOCK NUT NC           |
| 9    | 16  | BN04L       | 1/4" LOCK NUT                |
| 10   | 8   | B0412       | 1/4"NC x 1 1/4" HEX BOLT     |
| 11   | 4   | BU0410      | 1/4 x 1" x 1 1/2" U-BOLT     |
| 12   | 2   | GL767762-AA | ORANGE LIGHT                 |
| 13   | 2   | GL767762-R  | RED LIGHT                    |
| 14   | 1   | GL767762    | SALFORD WESBAR LIGHT KIT     |

Part # **GL767762** includes lights (GL767762-AA & GL767762-R) and wiring.



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