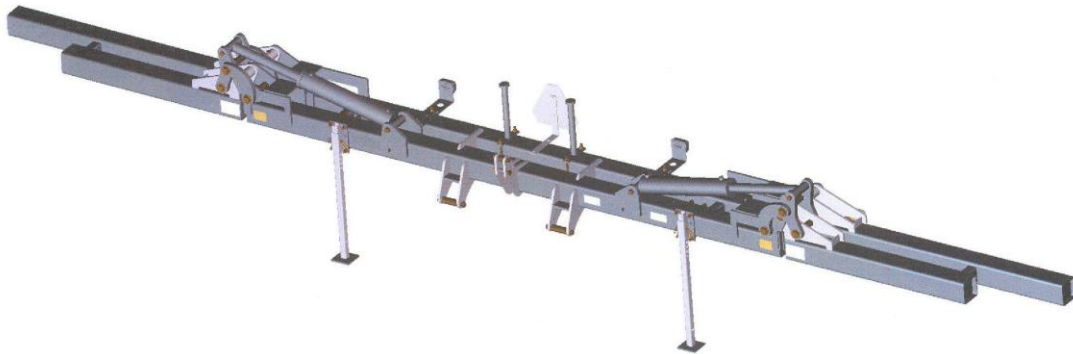




## **3800 SERIES HEAVY DUTY FOLDING TOOLBAR**

2565-772 • 10/2012  
**OPERATOR'S MANUAL**  
PART IDENTIFICATION



**AMCO MANUFACTURING CO.**  
*FOUNDED 1947*

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**AMCO**

# FOREWORD

You've just joined an exclusive but rapidly growing club.

For our part, we want to welcome you to the group and thank you for buying an AMCO Product.

We hope your new AMCO products will help you achieve both increased productivity and increased efficiency so that you may generate more profit. This operator's manual has been designed into six major sections.

Foreword, Safety Precautions, assembly instructions, Operation, parts identification and troubleshooting.

Throughout the manual references may be made to left side and right side. These terms are used as viewed from the operator's seat facing the front of the tractor.



This **SAFETY ALERT SYMBOL** indicates important safety messages in the manual. When you see this symbol, be alert to the possibility of **PERSONAL INJURY** and carefully read the message that follows.

The word **NOTE** is used to convey information that is out of context with the manual text. It contains special information such as specifications, techniques, reference information and other information of a supplementary nature.

The word **IMPORTANT** is used in the text when immediate damage will occur to the machine due to improper technique or operation. Important will apply to the same information as specified by note only of an immediate and urgent nature.



It is the responsibility of the user to read the operator's manual and comply with the safe and correct operating procedure and to lubricate and maintain the product according to the maintenance schedule in the operator's manual.

The user is responsible for inspecting his machine and for having parts repaired or replaced when continued use of the product would cause damage or excessive wear to the other parts.

It is the user's responsibility to deliver his machine to the AMCO dealer who sold him the product for service or replacement of defective parts that are covered by the warranty policy.

If you are unable to understand or follow the instructions provided in the publication, consult you local AMCO dealer or contact:

**AMCO MANUFACTURING CO.**

800/748-9022

662/746-4464

Website: [www.amcomfg.com](http://www.amcomfg.com)

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# WARRANTY POLICY

**AMCO Manufacturing, Inc.** warrants all equipment manufactured and sold by them to be free from defects in material or workmanship under normal use and service. If any part of the equipment sold by the company proves to be defective in material or workmanship within one year from date of original sale at retail or eighteen months from date of shipment from the company's factory, except for Protect-O-Shield bearings for which the time of warranty is two years from date of original sale of the implement, return defective equipment to the factory, transportation charges prepaid; if the company finds such equipment to be defective in material or workmanship, it will be repaired or replaced, free of charge, f.o.b. factory. This warranty shall not be deemed to place any liability on AMCO Manufacturing, Inc., for any transportation charges, any labor or cost in the replacement of any parts.

The company assumes no liability for consequential damages of any kind and the purchaser by his acceptance of this equipment will assume liability for the consequences of its use or misuse by the purchaser, his employees or others. This warranty shall not apply to any piece of equipment or part thereof sold by this company which has been subject to any accident caused in transit, alterations by unauthorized service, negligence, abuse, or damage by flood, fire, or act of God. A defect in the meaning of this warranty in any part of said equipment shall not, when such part is capable of being removed, repaired, or replaced, operate to condemn such equipment.

**All parts have to be replaced with original AMCO parts in order for AMCO warranty to be valid.**

**Dealer must call AMCO for approval with warranty estimate before repairs are made to unit.**

**All parts replaced under warranty must be returned to AMCO with warranty claim.**

This warranty shall constitute the entire warranty and/or agreement between the manufacturer and the purchaser, and the manufacturer will not be responsible for any other warranties, guarantees, representations, obligations or liabilities, either oral or written, expressed or implied.

## SAFETY PRECAUTIONS

You can make your farm a safer place to live and work if you observe the safety precautions given. Study these precautions carefully and insist that those working with you and for you follow them.

Finally, remember this: an accident is usually caused by someone's carelessness, neglect or oversight.



### DANGER

Inspect and replace worn or frayed hydraulic hose, keep all connections tight. Escaping hydraulic fluid under pressure can have sufficient force to penetrate the skin and cause serious personal injury. Fluid escaping from a small hole can be almost invisible. Use a piece of cardboard or wood rather than the hands to search for suspected leaks.



### CAUTION

Consult your implement and tractor operator's manual for correct and safe operating practices. Be aware of towed implement width and allow safe clearance.



### CAUTION: SAFETY SIGNS

Safety decals are placed on the implement to alert the operator and others to the risk of personal injury or unsafe operation during normal operations and servicing.

1. The safety decals must be kept clean and in good condition to ensure that they are legible.
2. Safety decals must be replaced if they are missing or illegible.
3. When components are replaced during repair or servicing, check that the new components include the necessary safety signs.
4. Replacement safety decals may be obtained from your local AMCO dealer.



### WARNING

Never clean, lubricate or adjust a machine that is in motion. Always install the transport lock pins and bracket when transporting for any length of time or on public roadways.

If required to service unit in raised position, be sure to install all transport lock pins and locking bracket.

Be sure the implement is securely locked in the 3-point quick hitch before operating.

Do not allow children to operate this equipment.

Do not allow riders on the tractor or implement.

Use speeds and caution dictated by the terrain being traversed. Do not operate on any slope steep enough to cause tipping or loss of control.

Be sure all personnel are clear of the immediate area before operating.

Read and understand the operator's manual and require all other persons who will operate the equipment to do the same.

In operating on public roadways, where legal, be certain all lighting is operating properly and observe all traffic laws. Ensure slow moving vehicle emblem on tractor is visible.

Beware of increased stopping distances and control effort when operating with implements attached.

Be familiar with all tractor and implement controls and be prepared to stop engine and implements quickly in an emergency.

**FAILURE TO HEED MAY RESULT IN PERSONAL INJURY OR DEATH**

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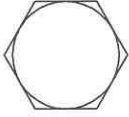
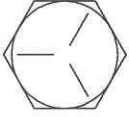


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## BOLT TORQUE

### READ THESE INSTRUCTIONS FIRST:

1. Improperly tightened bolts will result in damage, breakage, expense, and down time.
2. Always replace bolts with the specified grade and type.
3. Torque properly before first use of the machine and every 2-4 hours of use until you are sure bolts are staying tight.
4. The chart below is a guide for proper torque. Use it unless a specified torque is called out elsewhere in the manual.
5. Torque is the force you apply to the wrench handle or the cheater bar, times the length of the handle or bar.
6. Use a torque wrench whenever possible.

The following table shows torque in ft. lbs.

BOLT DIA. AND THREADS PER INCH		 OR 	
	GRADE 2	GRADE 5 A-325	GRADE 8
3/8-16	25	35	50
7/16-14	35	55	80
1/2-13	55	85	125
9/16-12	75	125	175
5/8-11	105	170	235
3/4-10	185	305	425
7/8-9	170	445	690
1-8	260	670	1030
1 1/8-7	365	900	1460
1 1/4-7	515	1275	2060
1 3/8-6	675	1675	2700
1 1/2-6	900	2150	3500
1 3/4-5	1410	3500	5600



**WARNING:** Never work around the toolbar / implement while in a raised position without using safety lockups.

## 3800 SERIES HYDRAULIC ASSEMBLY

1. Lubricate the o-ring on each of the restricted 90-degree fittings and install into the cylinder ports. **DO NOT OVER TIGHTEN AND DISTORT THE METAL BACK-UP WASHER.** Position the fitting by turning it out (counter clockwise) to a maximum of one complete turn and tighten the jam-nut.
2. Connect the 1/4" x 110" hoses on opposite ports of a "T" fittings. Then connect the hose fittings the restricted 90-degree fittings on the hydraulic cylinders.
3. Connect the 1/4"x 80" hoses to the remaining "T" ports and tighten **ALL** connections.

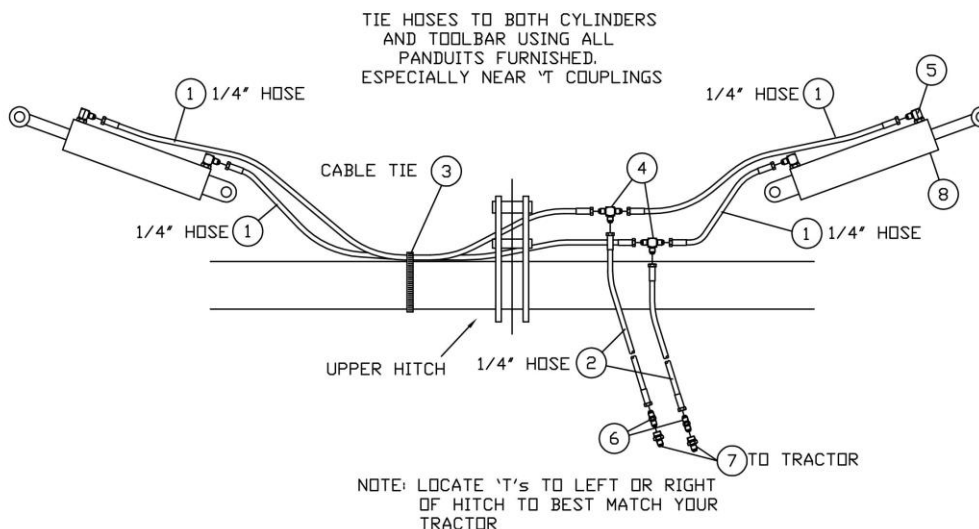
Adapters are provided for the hoses to connect to standard 3/4-16 straight thread quick coupler tips such as Case-IH part no. 1285718\* or Deere part no. AR945222.

4. Using the cable ties furnished, tie the outer port hoses to the lower ends of each cylinder and the hose to the toolbar on each side of the "T"s and at 2 to 3 foot intervals between.
5. **IMPORTANT:** Be sure to purge the air from the hydraulic cylinders. This insures smooth wing operation.

### CAUTION STAND CLEAR OF FOLDING WINGS!



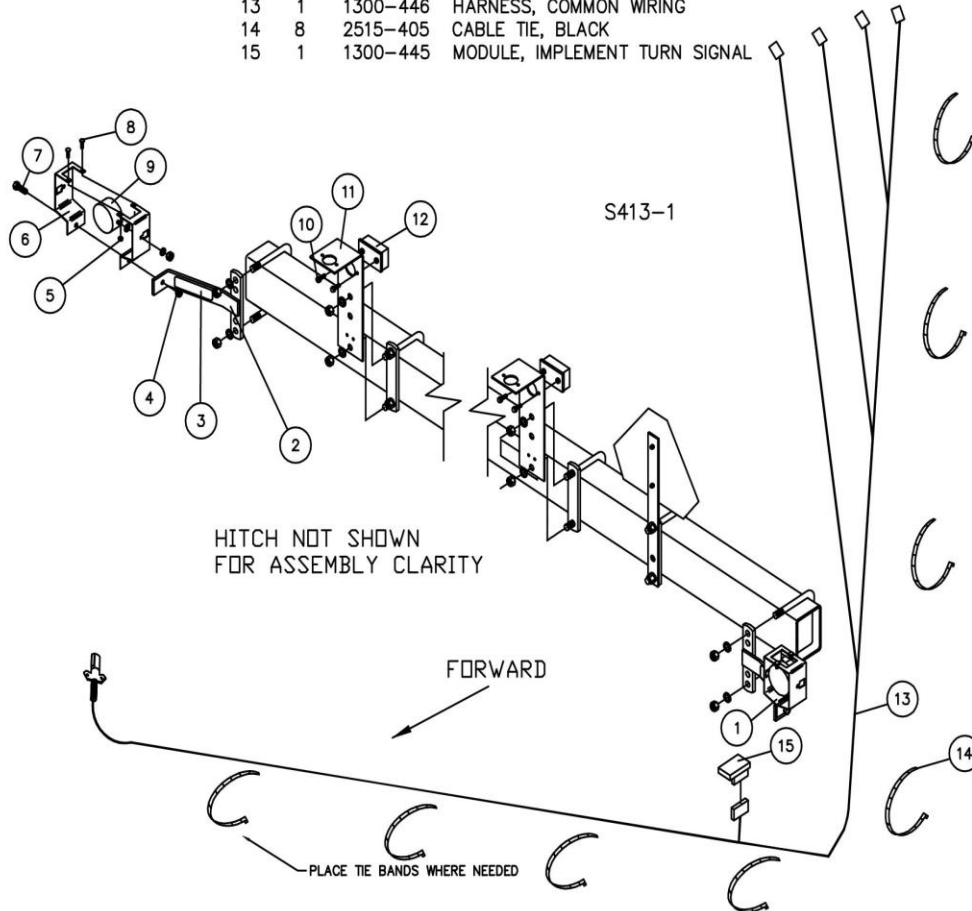
DET	QTY	PART NO.	DESCRIPTION
1	4	2515-366	HOSE 1/4 X 110" W/-6 JIC ENDS
2	2	2515-363	HOSE, 1/4 X 80" W/-6 JIC ENDS
3	12	2515-405	CABLE TIE, BLACK, 1/2" X 42"
4	2	2515-326	TEE, -6 / -6 / -6 JIC
5	4	2515-830	2501-06-12 90 DEG. FITTING (RESTRICTED)
6	2	2515-328	UNION, -6 TO -6 JIC
7	2	2515-327	ADAPTOR, 3/4-16 SAE TO -6 JIC
8	2	3841-300	5 X 24 HD WELDED HYDRAULIC CYLINDER



# SAFETY LIGHTING ASSEMBLY AND PARTS IDENTIFICATION

## 3400-175 - TOOLBAR LIGHT KIT

DET.	QTY.	PART NO.	DESCRIPTION
1	2	1300-137	AMBER LIGHT ASSEMBLY
2	2	3400-227	LIGHT BRACKET W.A., AMBER LAMP
3	2	2565-808	AMBER REFLECTOR, 1.97 X 6.3"
4	1	2520-357	1/2-3 LOCK HEX NUT ZP
5	2	2520-206	5/16-18 FLANGE LOCK NUT
6	2	1300-436	AMBER LIGHT BRACKET
7	1	2502-300	1/2-13 X 1-1/4 HHCS GR. 2 ZP
8	2	2505-205	5/16-18 X 3/4 CAR BLT GR.5
9	1	1300-448	LAMP, AMBER
10	4	2502-195	M8 X 12MM HHCS GR.5 ZP
11	2	3400-359	LIGHT BRACKET, RED LAMP
12	2	1300-447	LAMP, RED
13	1	1300-446	HARNES, COMMON WIRING
14	8	2515-405	CABLE TIE, BLACK
15	1	1300-445	MODULE, IMPLEMENT TURN SIGNAL



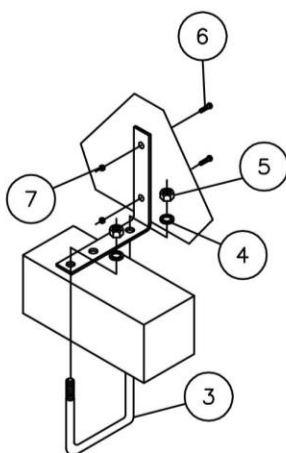


# SAFETY EQUIPMENT ASSEMBLY AND PARTS IDENTIFICATION

## SMV ASSEMBLY

1. Mount SMV emblem as shown with point of triangle up as near operators left of center as possible. Face so emblem is visible from rear of equipment.

DET	QTY	PART NO.	DESCRIPTION
1	1	2570-472	SMV EMBLEM WITH BACKING
2	1	3500-313	SMV BRACKET
3	1	2570-478	3/4 X 7 X 9 U-BOLT, ZP
4	2	2525-501	3/4 MED LOCKWASHER ZP
5	2	2520-504	3/4-10 HEX NUT ZP
6	2	2502-105	1/4-20 X 3/4 HHCS GR 5 ZP
7	2	2520-152	1/4-20 HEX NUT ZP



# ASSEMBLY

## OPTIONAL EQUIPMENT:

### GAUGE WHEELS

Gauge wheels maintain the frame at a constant level in respect to the ground contour.

Mount each gauge wheel an equal distance from the center of the main frame.



**CAUTION:** ON 3800 MODELS, BEFORE ACTIVATING FOLDING HINGE CHECK FOR OBSTRUCTIONS, ESPECIALLY CHECK GAUGE WHEEL POSITIONS TO BE SURE THAT GAUGE WHEELS ARE SET TO CLEAR TRACTOR AND OPERATOR.



**CAUTION:** CLEAR ALL PERSONNEL FROM AREA BEFORE FOLDING OR UN-FOLDING TOOLBAR.



**CAUTION: STAND CLEAR OF FOLDING WING!**

## ATTACHING 3800 TOOLBAR TO TRACTOR



**CAUTION:** BEFORE ATTACHING TO TRACTOR, BE SURE HITCH PINS ARE COMPLETELY ASSEMBLED TO MATCH YOUR TRACTOR HITCH.



**CAUTION:** MAKE CERTAIN THAT CENTER LINK AND QUICK COUPLER ARE LOCKED AND LOCK PINS ARE PROPERLY INSTALLED BEFORE MOVING.

### Detaching from Tractor



**CAUTION:** To avoid injury from escaping hydraulic oil under pressure, relieve the pressure in the system before removing hoses from breakaway couplers.

**IMPORTANT:** To prevent possible tipping, install parking stands on toolbar before disconnecting from tractor.

# FIELD OPERATION

## PRE-OPERATION CHECK LIST:

Use this checklist each time you operate the 3800 Toolbar in the field. It will help you obtain satisfactory field operation quickly.

1. Tractor sway blocks in upper position.
2. Center link adjusted for level frame in field operation.
3. Tractor lift links set in lateral float.
4. Hitch pins fastened and correct spacers used.
5. Quick couplers latched.
6. Adequate ballast added to front of tractor.

## MAIN FRAME HEIGHT:

Without gauge wheels, set the tractor rockshaft control lever to obtain the desired frame height.

With frame gauge wheels, put the rockshaft control lever all the way forward to lock “it” in the float position, which will enable the frame gauge wheels to maintain the frame at a uniform height from the ground.

## LEVELING MAIN FRAME

Adjust lift links and center link as necessary to make frame level and perpendicular to the ground.

Before activating/folding hinge check for obstructions, especially check gauge wheel positions to ascertain proper tractor and cab clearance.

NOTE: If gauge wheels are to be used, make leveling adjustments after gauge wheels are installed.

## CLOSED CENTER HYDRAULIC SYSTEM

Wing fold hydraulic valve must be in float position to allow the wings to “**flex**” up and down while operating in the field.

Wing fold hydraulic valve must be in neutral position to hold the wings “**rigid**” while operating in the field.

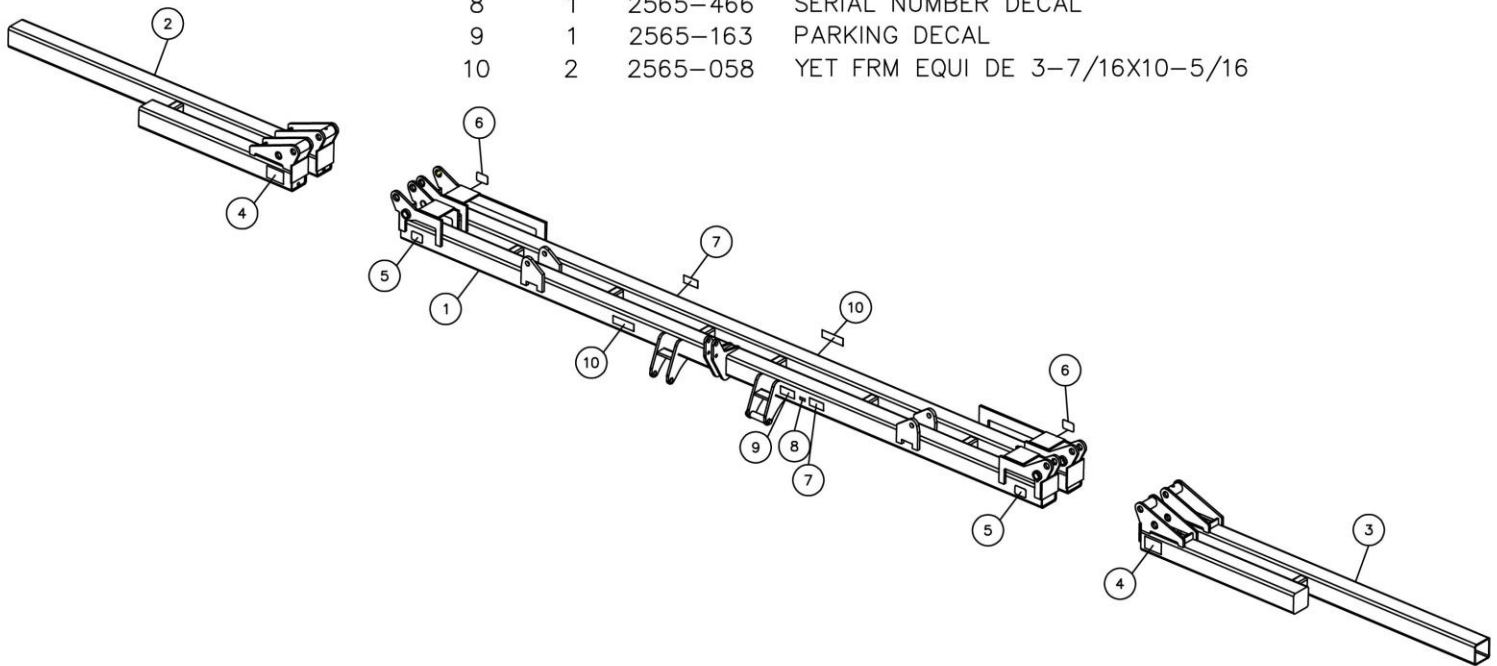


**CAUTION: ALWAYS FOLLOW ALL STATE, FEDERAL, AND LOCAL LAWS WHEN TRANSPORTING 3800 TOOLBAR ON PUBLIC ROADS.**

# PARTS IDENTIFICATION

## SAFETY & DECALS

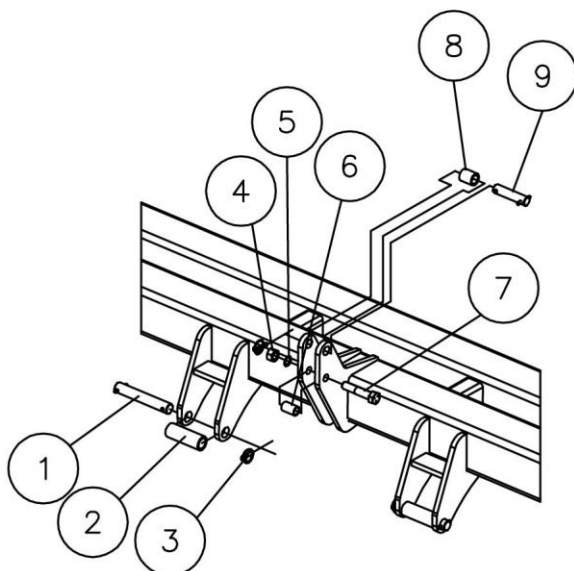
DET	QTY	PART NO.	DESCRIPTION
1	1	3841-200	41' CENTER SECTION W.A.
1	1	3831-200	31' CENTER SECTION W.A.
2	1	3841-201	R.H. WING W.A.
2	1	3831-201	L.H. WING W.A.
3	1	3841-202	L.H. WING W.A.
3	1	3831-202	R.H. WING W.A.
4	2	2565-159	FOLDING WING CAUTION DECAL
5	2	2565-803	AMBER REFLECTION 2.91 X 4.3
6	2	2565-804	RED REFLECTOR 2.91 X 4.3
7	2	2565-086	3841 DECAL
8	1	2565-466	SERIAL NUMBER DECAL
9	1	2565-163	PARKING DECAL
10	2	2565-058	YET FRM EQUI DE 3-7/16X10-5/16



## PARTS IDENTIFICATION

### 3800 HITCH

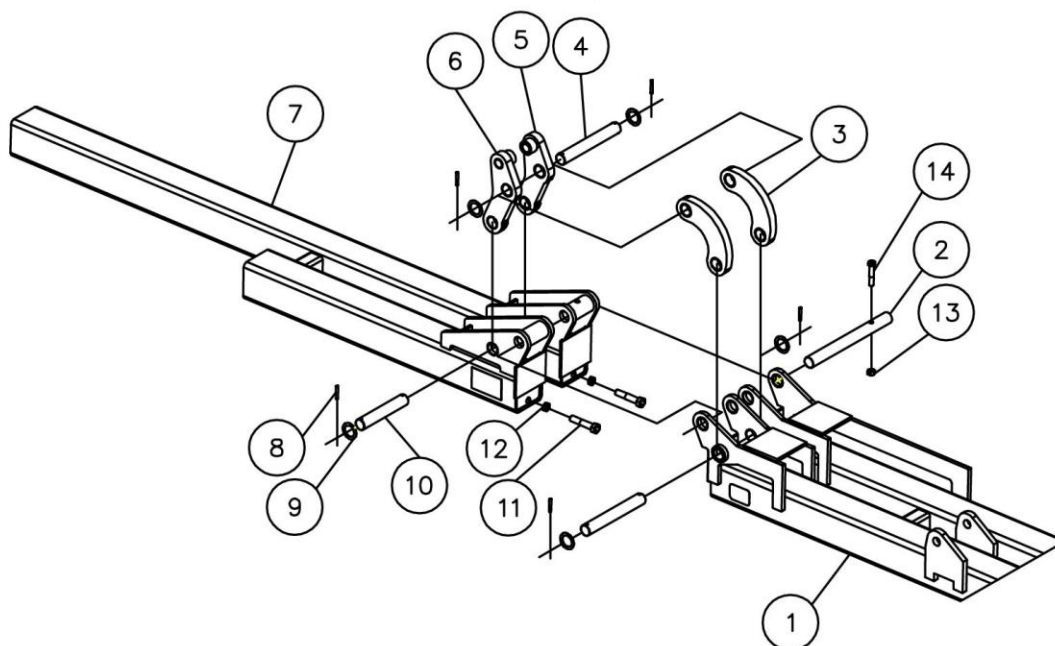
DET	QTY	PART NO.	DESCRIPTION
1	2	3560-110	60' LOWER HITCH PIN ASSEMBLY
	1	2530-208	3/8 X 2-1/2 ROLL PIN ZP
	1	3560-310	54' LOWER HITCH PIN ZYD
2	2	3560-304	60' BUSHING (LONG) ZYD
3	3	2570-454	KLIK PIN DANUSER #7524
4	1	2520-555	1-8 HEX NUT ZP
5	1	2525-550	1" MED LOCKWASHER ZP
6	1	3400-312	UPPER HITCH PIPE
7	1	2502-770	1-8 X 5 HHCS GR5 ZP
8	1	3560-303	60' UPPER HITCH BUSHING, ZYD
9	1	3560-109	60' UPPER HITCH PIN ASSEMBLY
	1	2530-208	3/8 X 2-1/2 ROLL PIN ZP
	1	3560-306	54' UPPER HITCH PIN ZYD



# PARTS IDENTIFICATION

## 3800 HINGE ASSEMBLY

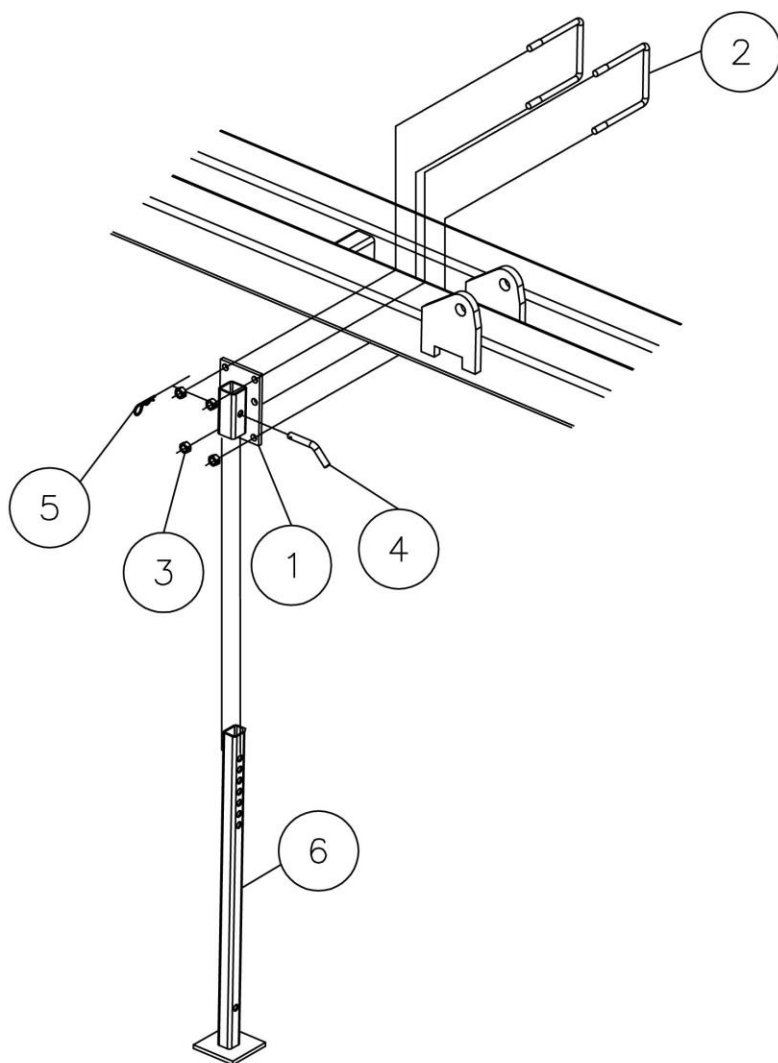
DET	QTY	PART NO.	DESCRIPTION
1	1	3841-200	41' CENTER SECTION W.A.
1	1	3831-200	31' CENTER SECTION W.A.
2	2	3841-303	HINGE PIN
3	2	3841-154	SHORT LINKAGE ASSEMBLY
	1	3841-306	SHORT LINKAGE
	2	3841-313	LINER, LINK BASE
4	4	3841-304	LINK PIN, LONG
5	2	3841-205	CYLINDER LINKAGE W.A. R.H.
	2	3841-313	LINER, LINK BASE
	1	3841-316	LINER, ROD END
6	2	3841-204	CYLINDER LINKAGE W.A. L.H.
	2	3841-313	LINER, LINK BASE
	1	3841-316	LINER, ROD END
7	1	3841-201	R.H. WING W.A.
7	1	3831-202	R.H. WING W.A.
8	12	2530-208	3/8 X 2-1/2 ROLL PIN ZP
9	12	2527-567	2" WASHER
10	2	3841-305	LINK PIN, SHORT
11	6	2502-604	7/8 9X31-1THD HD TPBLT G2Z
12	4	2520-543	7/8 -9 JAM HEX NUT ZP
13	2	2520-515	3/4-10 LOCK HEX NUT ZP
14	2	2502-404	3/4-10 X 4 HHCS GR. 5 ZP



## PARTS IDENTIFICATION

### PARKING STAND ASSEMBLY

DET	QTY	PART NO.	DESCRIPTION
1	2	3841-211	HD STAND BRACKET W.A.
2	4	2570-478	3/4 X 7 X 9 U-BOLT, ZP
3	8	2520-515	3/4-10 LOCK HEX NUT ZP
4	2	3500-333	STAND PIN, ZP
5	2	2570-465	7 GA. HAIRPIN COTTER ZP
6	2	3841-212	HD STAND W.A.

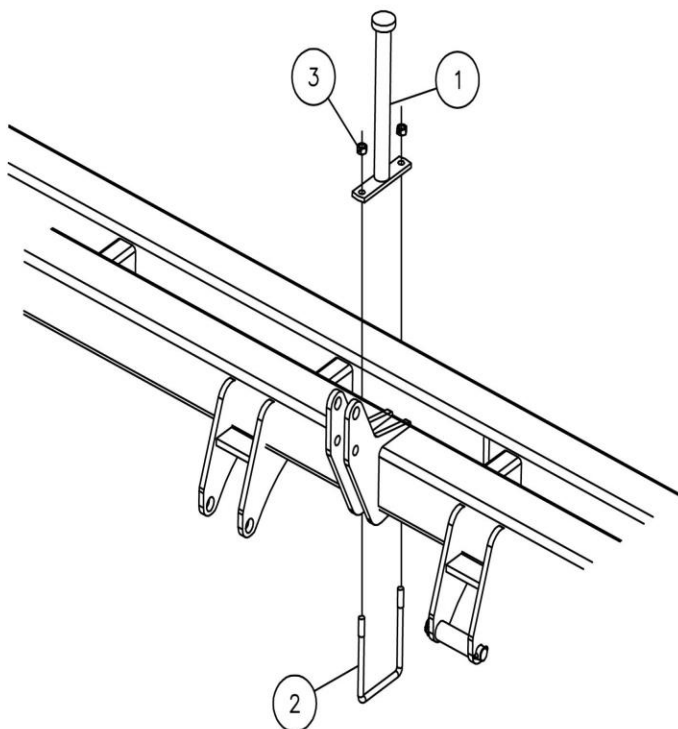




## PARTS IDENTIFICATION

### WING STAND ASSEMBLY

DET	QTY	PART NO.	DESCRIPTION
1	2	3841-203	WING STAND W.A.
2	2	2570-478	3/4 X 7 X 9 U-BOLT, ZP
3	2	2520-515	3/4-10 LOCK HEX NUT ZP



## TROUBLE SHOOTING

Problem	Cause	Solution
Hydraulic cylinders fail to operate properly	Hydraulic system improperly installed	Check for correct assembly of the hydraulic system
	Air in system	Check for air in the hydraulic system and purge system
	Blocked restrictors	Check restrictors for malfunctions

## NOTES:



AMCO Manufacturing, Inc. produces a wide range of primary tillage implements and farm equipment that have been engineered and designed for the agricultural, farming, wildlife, forest and construction industry since 1947. Our staff has many years of experience in the jobs and duties that they perform everyday. We are committed to the needs of our customers and strive to improve their productivity. Quality products mean very little without courteous service.

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