

# LandRunner II Table of Contents

Manual Number: 0270000 Rev. 9-23-09

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# Introduction

#### LandRunner

Welcome to Thurston Manufacturing Company. Our goal is to provide quality products and services to our customers. The company's BLU-JET products have a reputation for quality, excellence in design and proven durability. Energetic, resourceful and continuous improvement goals in Environmental, Safety, Quality, Production and Engineering keep our firm at the cutting edge of technology.

We hope your BLU-JET equipment will give you years of service.

Read this manual carefully. It will instruct you on how to operate and service your machine safely and correctly. Failure to do so could result in personal injury and\or equipment damage.

#### SAFETY INFORMATION

A DANGER: Indicates an imminently hazardous situation that, if

not avoided, will result in death or serious injury. The

sign will have the color combination of red and white.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The

sign will have the color combination of orange and

black.

A CAUTION:

Indicates a potentially hazardous situation that, if not

avoided, may result in minor or moderate injury. The

sign will have the color combination of yellow and black.

NOTE: Indicates a special point of information.

Carefully read and follow all safety signs. Reinstall safety signs that are damaged or missing.

- Right-hand and left-hand sides of the implement are determined by facing in the direction the implement will travel when going forward.
- Warranty is provided for customers who operate and maintain their equipment as described in this manual. Warranty registration is accomplished by the dealer completing and forwarding the WARRANTY REG-ISTRATION FORM to Thurston Manufacturing Company. It is in your best interest to insure that this has been done.



## INTRODUCTION

#### LandRunner

For your convenience we have four easy ways to register your warranty.

- Call our toll free number and ask for warranty registration. 1-800-658-3127
- Fax completed warranty registration form.

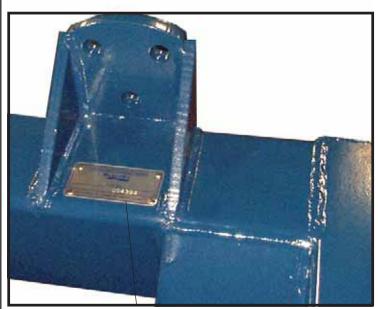
Fax: 402-385-3043

- Register on-line in warranty page at www.blu-jet.com
- · Complete and return registration form.

Thurston Manufacturing Company Warranty does not cover the following:

- 1) Cleaning, transporting, mailing and service call charges.
- 2) Depreciation or damage caused by normal wear, accidents, improper protection or improper use.

See complete Warranty for details.



The Serial Number is located from the rear of the tool bar on the right-hand side behind the tongue pull plate.

**Serial Number** 

Record your implement model and serial number in the space provided below. Your dealer needs this information to give you prompt, efficient service when you order parts.

MODEL NO	
SERIAL NO	 
DATE PURCHASED	 



# **DEALER CHECKLIST**

## LandRunner

it is wing ound

lothe	e Dealer:
functio checkli	t the implement thoroughly after assembly to be certain in ning properly before delivering it to the customer. The follow stis a reminder of points to cover. Check off each item as it is fo ctory or after proper adjustment is made.
PRE	E-DELIVERY CHECKLIST
0 1	. All hardware properly tightened
O 2	. Lubrication of grease fittings
O 3	. All decals properly located and readable
O 4	. Other adjustments for machine level height, etc.
O 5	. Overall condition (touch up any scratches, clean and polish)
O 6	. Operator's manual
	SET UP
DELI	VERY
	the operator's manual with the customer. Explain
the foll	owing:  I. Safe operation and service
	2. Correct machine installation and operation
	Daily and periodic lubrication and maintenance
	Daily and periodic inspections
	5. Trouble shooting
_	6. Storing machine
	7. Thurston Manufacturing Company parts and service 8. Have the customer write the machine model and serial
	number in space provided in manual introduction.
0 9	Give customer the operator's manual and encourage
	the customer to read the manual carefully.
	<ol><li>Completion and mailing of warranty registration form.</li></ol>
SIGNA <sup>*</sup> MODEL	DELIVERED TURE _ NO _ NO



## To The Owner

LandRunner

Thank you for your recent purchase of a new BLU-JET implement. The primary objective of Thurston Manufacturing Company is to build and provide you with a quality product. However, in the event that a problem does occur, it is imperative that your warranty registration is on file in order to accurately respond to your specific service circumstances.

For your convenience we have four easy ways to register your warranty:

Register
Warranty
One of
Four Ways

- Call our toll free number and ask for warranty registration.
  - 1-800-658-3127
- Fax your completed warranty registration form.
  - 1-402-385-3043
- Register on-line at: www.blu-jet.com
- Complete and mail the warranty registration form.

This manual has been prepared to assist you in the assembly of your new machine and contains information pertaining to safety, operations and all of its parts. Our personnel in sales and service are always available to assist you when questions arise concerning the assembly or operations of your tool bar.

When ordering parts, please refer to part numbers and descriptions as listed throughout this book. All parts and whole goods will be shipped FOB Thurston, Nebraska. Or FOB your regional distributor. Always check merchandise immediately upon receipt for damage or shortage. Note any discrepancy on carrier's bill of lading and notify Sender within 10 days. Returned goods will be subject to a 15% restocking charge. Thurston Manufacturing Company reserves the right to make improvements and modifications on equipment without obligation to change previously built equipment. All prices are subject to change without notice.



## **Limited Warranty**

#### LandRunner



Thurston Manufacturing Company warrants each new BLU-JET machine primary framework to be free from defects in material and workmanship for a period of five (5) years, normal wear of wearing parts excepted. Thurston Manufacturing Company further warrants each new BLU-JET product to be free from defects in material and workmanship, normal wear of wearing parts excepted, for a period of one (1) year. All accessories purchased and resold by Thurston Manufacturing Company will be warranted according to their respective manufacturer. Tires on BLU-JET equipment are warranted through their respective tire manufacturers and their network of dealers in your local area.

Warranty begins from date of delivery to the original purchaser and applies to all new BLU-JET products that have not been altered and are being used for the intended purpose. Negligence, abuse or modification of equipment manufactured by or purchased and resold by Thurston Manufacturing Company will void this warranty.

The obligation of Thurston Manufacturing Company to honor this warranty is limited to the repair or replacement of defective merchandise, to the original purchaser, subject to inspection of equipment in question by an authorized Thurston Manufacturing Company sales or service technician. In the USA, freight of warranty replacement parts including main frame centers and wings will be prepaid for a period of one (1) Year by Thurston Manufacturing Company. Shipments of repaired or replaced parts including main frame centers and wings after one year will be paid by the customer.

Return of defective goods must be made within thirty (30) days of failure to Thurston Manufacturing Company, Thurston, Nebraska USA or to the nearest authorized BLU-JET Distributor or Rep Sales and service outlet.

Thurston Manufacturing Company will not be held responsible for any repair charges made by customers without prior written consent and prior equipment inspection by an authorized Thurston Manufacturing Company sales or service technician.

This warranty shall not be interpreted to render liability for injury or damages of any kind, direct, consequential or contingent to person or property. This warranty does not extend to loss of crops, economic and/or commercial loss, loss because of delay in crop production or any expense incurred for labor, supplies, substitute machinery, rental or for any other reason. This warranty is subject to any existing condition of supply, which may directly affect Thurston Manufacturing Company's ability to obtain materials of manufacture and delivery of replacement parts.

Thurston Manufacturing Company reserves the right to make improvements in design and changes in specifications at any time without incurring any obligation to owners of units previously sold.

No one is authorized to alter, modify or enlarge this warranty nor its exclusions, limitations and reservations. Thurston Manufacturing Company makes no representations or warranties, expressed or implied (including implied warranties of merchantability and fitness), except for those set forth in Thurston Manufacturing Company's current applicable published warranty policies and procedures.

Layton W. Jensen, President

022398\mgmt



## Safety

#### LandRunner



#### RECOGNIZE SAFETY INFORMATION

 This is the safety-alert symbol. When you see his symbol on your machine or in this manual, be alert to the potential for personal injury. Follow recommended precautions and safe operating practices.



# A

#### FOLLOW SAFETY INSTRUCTIONS

- Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety sign.
- Learn how to operate the machine and how to use controls properly.
- Do not let anyone operate machine without instruction.
- Keep your machine in proper working condition.
- Unauthorized modification to the machine may impair the function and\or safety and affect machine life





#### PROTECT CHILDREN AND BYSTANDERS

- Before you back, LOOK CAREFULLY behind for children.
- · Clear area of children, pets and bystanders.





#### **HIGHWAY AND TRANSPORT OPERATIONS**

Adopt safe driving practices:

- Keep the brake pedals latched together at all times.
   NEVER USE INDEPENDENT BRAKING WITH MACHINE
- IN TOW AS LOSS OF CONTROL AND/OR UPSET OF UNIT CAN RESULT.
- Always drive at a safe speed relative to local conditions and ensure that your speed is low enough
- for a emergency stop to be safe and secure. Keep speed to a minimum.
- Reduce speed prior to turns to avoid the risk of overturning.
- Avoid sudden uphill turns on steep slopes.
- Always keep the tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.
- · Do not drink and drive.
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- When driving the tractor and equipment on the road or highway, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.





## Safety

#### LandRunner



#### **HIGHWAY AND TRANSPORT OPERATIONS**

- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersection, etc.
- Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating.
- Always operate equipment in a position to provide maximum visibility at all times. Makes allowances for increased length and weight of the equipment when making turns, stopping the unit, etc.





#### TRANSPORT SAFETY

- A safety chain will help control drawn equipment should it accidentally separate from the drawbar.
- Attach the chain to the tractor drawbar support or other anchor location. Provide only enough slack in the chain to permit turning.
- Use hydraulic cylinder transport lockup during road transportation.
- Maximum road speed is 20 m.p.h.





#### AVOID HIGH PRESSURE FLUIDS

- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- · Search for leaks with a piece of cardboard.
- Protect hands and body from high pressure fluids.
- · If an accident occurs, see a doctor immediately.



### **DISPOSE OF FLUIDS PROPERLY**

- Improperly disposing of fluids can harm the environment and ecology. Before draining any fluids, contact your local environmental agency for the proper waste disposal methods.
- Use proper container when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.
- DO NOT pour oil into the ground, down a drain, or into a stream, pond, or lake. Observe relevant environmental protection regulations when disposing of oil and other harmful waste.







# **Safety**

#### LandRunner



## **Observe Safety Signs**





AP 2234-7-98



/AP 2914





-AP 2483-8-98



AP 222 8-90

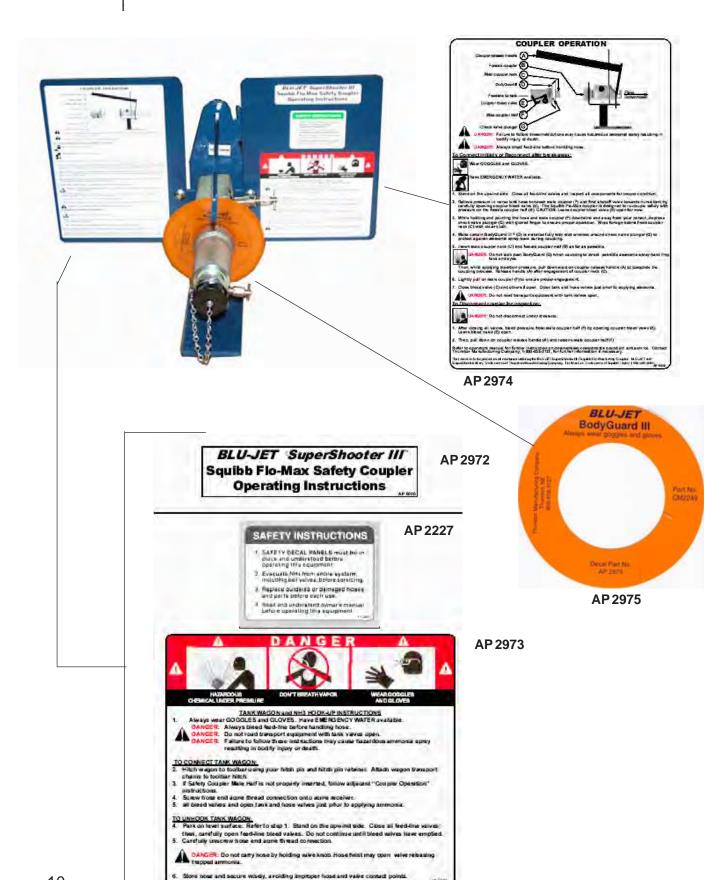


AP 2469-7-98



## **Safety Decals**

#### LandRunner



# BLU-JE1 LandRunner Task implement specification.

# **Operating Instructions**

#### **Procedures**

#### Illustrations

Hitch

**NOTE: Implement** hitch weights are designed to match tractor size ranges. Check the following chart to confirm your particular

1. The tractor must be equipped with a drawbar and a drawbar safety chain clevis. For rigid frame tractors equipped with swinging drawbar, the drawbar must be located in a fixed position in the center of the tractor. Refer to your tractor operators manual for drawbar adjustment and drawbar operating instructions.



**Generic Photo** 

	Eng	gine	Drav	wbar
Category	HP R	lange	Vertical Lo	ad Pounds
I	20 47		731	1,405
II	40	133	1,236	3,597
III	80	227	2,248	5,957
IV	180	400	4,777	10,341

- Tractor to tool bar connection
- Before connecting the tool bar to the tractor drawbar, raise the tractor three point hitch (if equipped) to prevent interference between the implement and the tractor. Connect the tool bar to tractor drawbar ONLY. DO NOT connect the tool bar to any other part of the tractor. Connect the tool bar clevis to the tractor drawbar with hitch pin. Install the safety chain through the tractor drawbar support bracket.
- Safety hitch pin
- 3. Always use a safety hitch pin of the correct diameter. Make sure that the hitch pin is locked in place with a safety type lock pin or other locking device.
- Safety chain
- 4. Always use a safety chain between the toolbar and the tractor. Install the chain to the tractor drawbar support bracket. Support the center of the chain with a clevis installed to the tractor drawbar.



**WARNING:** In case the tractor hitch pin is lost during transporting. The safety chain must be attached between the implement and tractor to prevent separated implement from running freely and causing damage or injury.



**WARNING:** Do not move articulated tractor steering wheel until everyone is clear of the equipment. Moving the steering wheel can swing or move attached equipment which could cause serious personal injury.



**WARNING:** Tractor drawbar must be in a fixed position before transporting implement. Implement will sway or slam against tractor resulting in equipment damage or injury to personnel.



## **Operating Instructions**

#### LandRunner

#### Task

#### **Procedures**

#### Illustrations



Remote hydraulic

the tractor remote

is moved

rearward

when the

lever is

moved

forward.

and lowers

control lever

NOTE:
Always
connect the
hoses so the
toolbar
raises when

 Connect the toolbar hydraulic hoses to the tractor remote couplers. The 3/8" hoses supply oil to the toolbar lift cylinders. The 1/4" hoses supply oil to the wing fold cylinders.





**WARNING:** Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a minor cut or opening in the skin. If injured by escaping fluid, see doctor at once. Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system. Relieve all pressure before disconnecting the lines or performing other work on the hydraulic systems.

- Remote hydraulic
- It may be necessary to tie
  the hydraulic hoses up to
  keep them away from the
  hitch area. A tarp strap
  around the hoses and
  between the two point arms
  works well.



- Leveling mainframe
- Before leveling the machine tire pressure should be checked.

Inflate mainframe tires to:
Inflate 11L-15, 8Ply, tire 36 psi. Max.
Inflate 11L-15, 12 Ply, tire 52 psi. Max.
Before beginning operation
of this machine the main
frame must be level. Place
toolbar on level surface.
Adjust the hitch up or down
in the tongue connector and
connect to tractor.



Jack stand

8. Jack Stand (unhitching)
Pull ring on drop leg jack
plunger and lower sand pad
to ground. Secure plunger in
holes before cranking jack to
the ground.

**IMPORTANT:** Always lower the jack stand to the ground before disconnecting the tool bar from the tractor.



BLU-JET		Operating Instru	ctions
LandRunner	Task	Procedures	Illustrations
•	Attaching electrical harness	9. Attach 7 pin electrical harness before road transport.	
	Hydraulic gauge wheel	10. Leveling Hydraulic Gauge Wheel Check tire pressure before leveling toolbar. Hydraulic gauge wheels do not require depth collars. Additional leveling can be accomplished with tire air pressure or installation of optional hydraulic gauge wheel jack adjust kit. (Bundle Number 27210910)	
	Lift wheel depth collars NOTE: Unequal depth collar installation may result in unequal depth control of knives. NOTE: Toolbars with Liquid or Dual Place- ment hydraulic systems require a hydraulic systems	11. Install equal lengths of cylinder depth collars to the right and left-hand center section wheel lift cylinders. This will provide equal depth of knives	Deptil



# **Operating Instructions**

#### LandRunner

#### Task

#### **Procedures**

#### Illustrations



# Nurse tank hitch

NOTE:

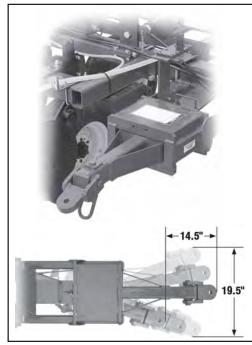
Periodically check Latch mechanism to ensure proper latching in the extended position.

12. Nurse tank hitch can be retracted and moved from side to side for easy hookup. Hitch will automatically lock in the extended position.

#### **A** WARNING

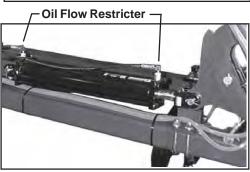
#### Pinch point

To prevent Injury Keep hands clear when extending or retracting the swing slide insert



Oil Flow Restricter

13. Hydraulic wing cylinders are designed with oil flow restricter fittings to provide a smooth and even folding sequence. Oil flow restricter modification may negatively affect the folding performance. The oil flow restricters slow the wing operation for maximum safety.



Cylinder rod maintenance

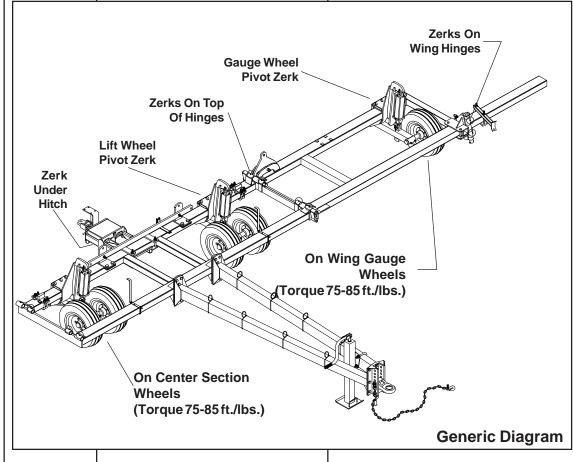
14. All exposed cylinder rods should be greased before seasonal storage to prevent rusting. Remove depth collars and

Remove depth collars and lubricate exposed cylinder rods.



LandRunner Task Procedures Illustrations  Lubricating wing hinges all wing hinges daily.  NOTE: Grease all zerks daily.  Wheel leg lubrication  Coulter pivot shaft lubrication  Coulter hub lubrication  18. The plug on the coulter hub can be removed. A zerk can be installed. Hub and sprande accombile should be spranded.				
Lubricating wing hinges  NOTE: Grease all zerks daily.  Wheel leg lubrication  16. Grease wheel leg daily.  Coulter pivot shaft lubrication  17. Grease all coulter arm pivots.  Coulter hub can be removed. A zerk can be installed. Hub and spindle	BLU-JET		Operating Instru	uctions
wing hinges  NOTE: Grease all zerks daily.  Wheel leg lubrication  16. Grease wheel leg daily.  Coulter pivot shaft lubrication  17. Grease all coulter arm pivots.  Coulter hub can be removed. A zerk can be installed. Hub and spindle	LandRunner	Task	Procedures	Illustrations
Grease all zerks daily.  Wheel leg lubrication  16. Grease wheel leg daily.  Coulter pivot shaft lubrication  17. Grease all coulter arm pivots.  Coulter hub can be removed. A zerk can be installed. Hub and spindle	<b>&gt;</b>			
Coulter pivot shaft lubrication  17. Grease all coulter arm pivots.  Coulter hub can be removed. A zerk can be installed. Hub and spindle		Grease all		
pivot shaft lubrication  Coulter hub can be removed. A zerk can be installed. Hub and spindle	•		16. Grease wheel leg daily.	
hub can be removed. A zerk can be installed. Hub and spindle	•	pivot shaft	17. Grease all coulter arm pivots.	
twice seasonally.	•	hub	can be removed. A zerk can be installed. Hub and spindle assembly should be greased	
water tank operation and maintenance  19. Location of nine-gallon emergency water tank/ toolbox. Change water daily to provide fresh clean water to flush exposed skin or eyes. Drain water daily in cold temperatures to prevent freezing and bursting tank.  20. In case of exposure to fertilizer, open faucet or pull top end of hose loose to flush exposed part of body. Remove contaminated clothes as soon as possible.		water tank operation and	emergency water tank/ toolbox. Change water daily to provide fresh clean water to flush exposed skin or eyes. Drain water daily in cold temperatures to prevent freezing and bursting tank.  20. In case of exposure to fertil- izer, open faucet or pull top end of hose loose to flush exposed part of body. Remove contaminated	ALU-JIT T

BLU-JET		Operating Instructions							
LandRunner	Task	Procedures	Illustrations						
•	Lug Nut Torque	21. Lug nut Torque							
		Check every hour first four hours.							
		2. Check every four hours to first twenty hours.							
		3. Check once every fifty hours thereafter.							
<b>&gt;</b>	Lubrication	22. Lubrication							
		Grease all zerks daily							
		Grease coulters daily							





## **Anhydrous Ammonia Operating Instructions**

LandRunner

Task Procedures

Illustrations

Attend Anhydrous Ammonia Safety Training Class Provided By Your Dealer Before Operating this equipment.

Operator protection
Because of the hazards
associated with handling
Anhydrous Ammonia,
operators must use proper
protective equipment.
Minimum equipment includes tight-fitting chemicalproof goggles, long cuff
rubber gloves, heavy-duty
long sleeved shirt. In case of
exposure, have a minimum
of 5 gal's of flushing water
available at all times.



#### Checking System

With personal protective equipment in place, visually inspect the tool bar and system components for integrity, includes hoses that may be subject to inadvertent contact with structural surfaces resulting in premature exterior hose deterioration.

#### ► Hooking Up Nurse Tank

With personal protective equipment in place, hitch the nurse tank to the tool bar using a keyed hitch pin. Affix wagon tongue safety chains securely to Nurse tank chain loops provided.

Carefully hand tighten the nurse tank supply hose connection. Position hose to allow unobstructed movement in case of Nurse Tank break away. Do not allow supply hose to contact surfaces that may cause abrasion or wear including sharp corners, soil or roads.

With personal protective equipment in place, confirm the functional operation of the break away coupler on a daily basis. First bleed pressure off of tank supply hose and 1-1/4" quick coupler using the bleed valves provided.

Sharply pull on the tank supply hose. The coupler mechanism should release under these forces. Visually inspect coupler for corrosion, foreign elements and proper seating of mating poppets.

DO NOT transport equipment from field to field with tank and supply line valves open. When immediately ready for field application, beginning at the tank, and with personal protective equipment in place, slowly open all supply line valves.



**WARNING:** Position your body away from the bleed valve exit hole to avoid contact with Anhydrous Ammonia when bleed valve is opened. Contact with skin will cause severe chemical burns.



**WARNING:** Avoid breathing ammonia vapors. Clear all personnel from the area before opening system. Inhalation of vapors will irritate or damage respiratory tract and lungs, resulting in injury or death.



Bleed Valve



# **Anhydrous Ammonia Operating Instructions**

#### LandRunner

Task

**Procedures** 

Illustrations

#### Disconnection Of Nurse Tank

- 1. With personal protective equipment in place, and beginning at the tank, fully shut off the supply hose valves. If the supply hose is a tank wagon component (as opposed to a tool bar component) an additional hand operated globe valve shut off located between the quick coupler and the Heat Exchanger feed line will significantly speed up the tank wagon change process.
- Clear all personnel from area except for the operator. While considering the
  direction of the wind to avoid ammonia vapor drift toward the operator or any
  other personnel, beginning at the tank, slowly open supply line bleed valves to
  release pressure from the hose.
- 3. Physically grasp, lift and lightly shake the supply hose mid section to insure total evacuation of ammonia. Once again, be wary of the wind direction.
- 4. Place the supply hose in a transport storage position, preventing it from becoming entangled or in contact with sharp edges or abrasive surfaces.
- 5. Always park and unhook the nurse tank on a smooth and level surface. Block the wheels to prevent tank wagon runaway. High winds or uneven terrain can cause unblocked tank wagons to move out of control.
- 6. Disconnect tank wagon tongue safety chains, hitch pin key and hitch pin.



**CAUTION:** Fifth wheel style running gear front axles may inadvertently rotate in uneven soil conditions when the hitch pin is pulled causing the tongue to come into contact and potentially injuring the operator.



**WARNING:** Before maintenance is preformed on any part of the NH<sub>3</sub> system, be sure the total system is bled off and all liquid is drained. Liquid ammonia can remain trapped in system cavities, even when the system has been opened to atmospheric pressure. Always assume that ammonia remains in the system components and hoses at all times. Always wear tight-fitting chemical-proof goggles, long cuff rubber gloves, heavy-duty long sleeved shirt and exercise extreme caution.

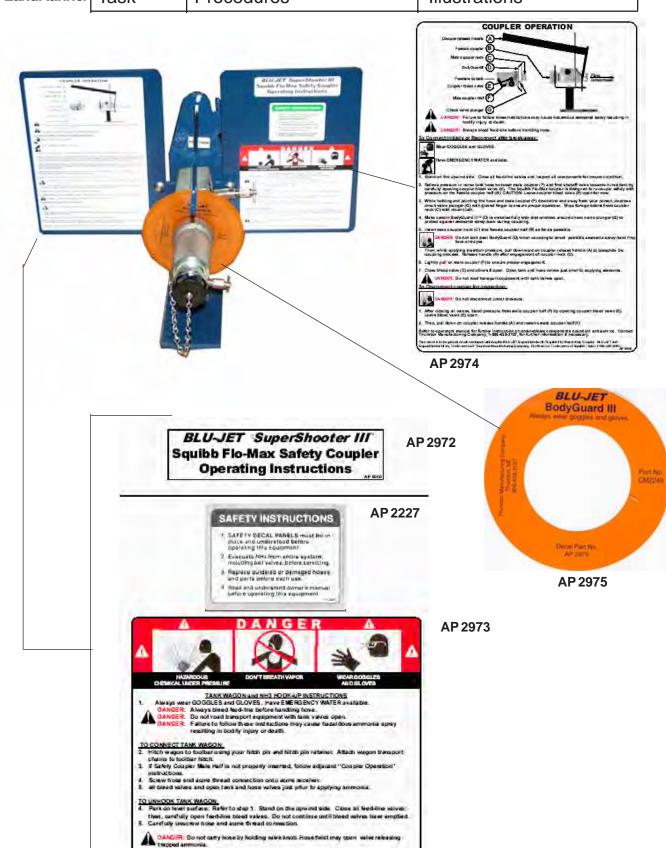


## **Safety Decals**

LandRunner

Task Procedures

Illustrations



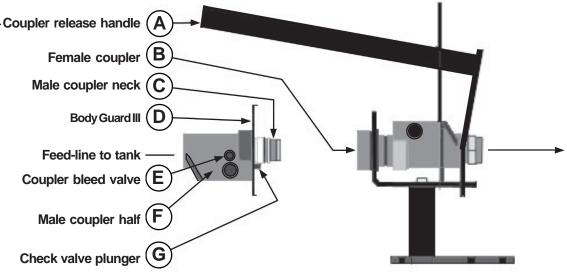
6. Store nose and secure wisely, avoiding improper hose and valve contact points.



## **Coupler Operations**

#### LandRunner

NOTE: Read coupler operation decal (AP 2974) for safety instructions







**DANGER:** Always wear protective gear



DANGER: Avoid breathing ammonia vapors



**Hazardous** chemical under pressure



Disconnect

- Connecting | 1. Stand on the upwind side. Close all feed-line valves and inspect all components for proper condition.
  - 2. Relieve pressure in nurse tank hose between male coupler (F) and first shutoff valve towards nurse tank by carefully opening coupler bleed valve (E). The Squibb Flo-Max coupler is designed to re-couple safely with pressure on the female coupler half (B). CAUTION: Leave coupler bleed valve (E) open for now.
  - 3. While holding and pointing the hose and male coupler (F) downwind and away from your person, depress check valve plunger (G) with gloved finger to ensure proper operation.
    Wipe foreign debris from coupler neck (C) with clean cloth.
  - 4. Make certain BodyGuard III™ (D) is installed fully with slot oriented around check valve plunger (G) to protect against ammonia spray-back during coupling.
  - 5. Insert male coupler neck (C) into female coupler half (B) as far as possible.

Then, while applying insertion pressure, pull downward on coupler release handle (A) to complete the coupling process. Release handle (A) after engagement of coupler neck (C).

- 6. Lightly pull on male coupler (F) to ensure proper engagement.
- 7. Close bleed valve (E) and others if open. Open tank and hose valves just prior to applying ammonia.
- 1. After closing all valves, bleed pressure from male coupler half (F) by opening coupler bleed valve (É). Leave bleed valve (E) open.
- 2. Then, pull down on coupler release handle (A) and remove male coupler half (F).







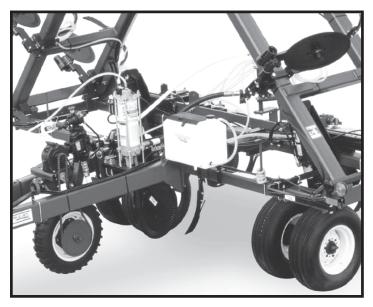


## **Emergency Fresh Water Tank Location and Assembly**

**LandRunner** Task

sk Procedures

Illustrations



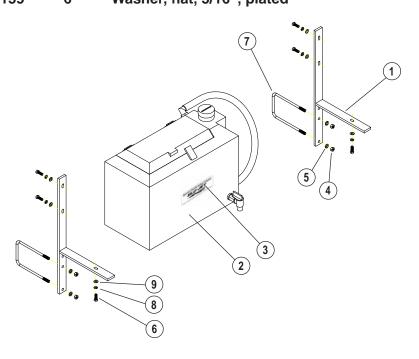
Location of Nine-gallon emergency water tank/toolbox.

Change water daily to provide fresh clean water to flush exposed skin or eyes. Drain water daily in cold temperatures to prevent freezing and bursting tank.

In case of exposure to anhydrous ammonia, open faucet or pull top end of hose loose to flush exposed part of body. Remove contaminated clothes as soon as possible. Seek medical attention.



Ref.	Part No.	Req.	Description
1.	AM 2136	2	Bracket, tank mounting, 9 gallon
2.	AP 2137	1	Tank, 9 gallon freash water safety
3.	AP 2215	1	Decal, BLU-JET, 3" x 8"
4.	BP 3001	4	Nut, hex, 3/8"-16, grade 2, plated
5.	<b>BP 3002</b>	4	Washer, lock, 3/8", plated
6.	BP 3108	6	Hex cap screw, 5/16"-18 x 1", grade 5, plated
7.	BP 3214	2	U-bolt, 3/8"-16 x 4-1/16" x 7", plated
8.	BP 3158	6	Washer, lock, 5/16", plated
9	BP 3159	6	Washer, flat, 5/16", plated

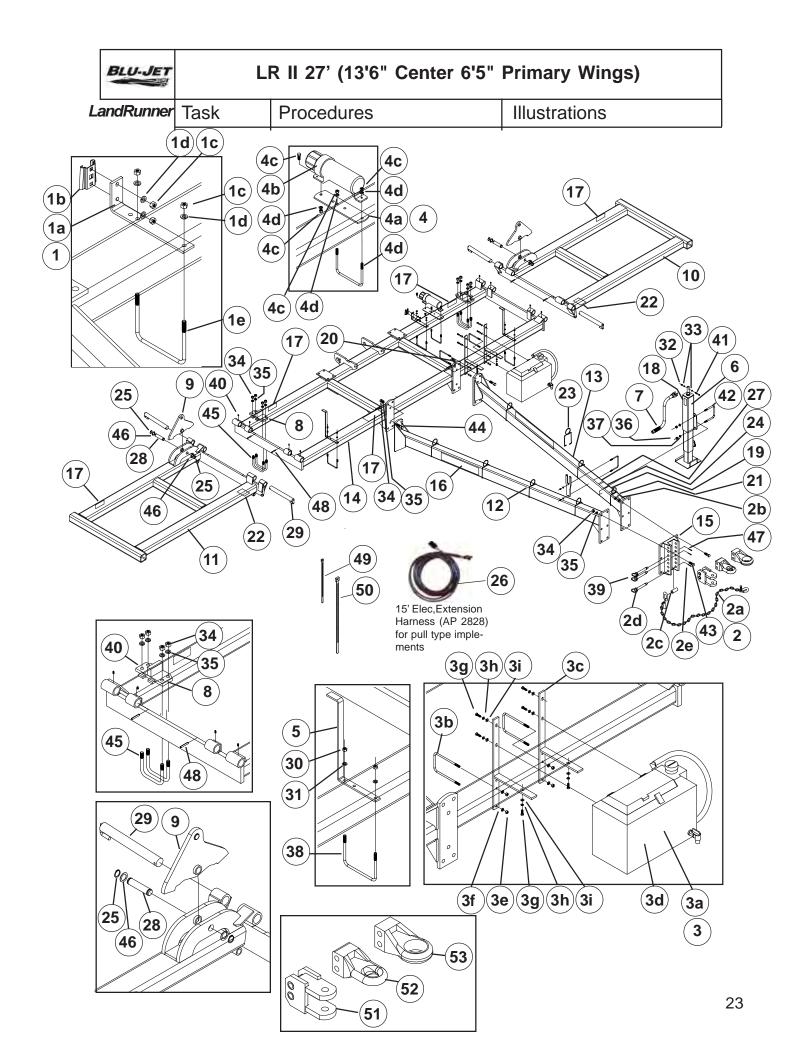




# LR II 27' (13'6" Center 6'5" Primary Wings)

LandRunner Task Procedures Illustrations

Ref.	Part No.	Req.	Description				
1.	<b>AAM 2098</b>	1	SMV Kit, 4"x 6"	Ref.	Part No.	Rea.	Description
1a.	AM 4077	1	Bracket, SMV Mounting	16.	AP 2206	2	Decal, LandRunner
1b.	AP 2543	1	SMV Mounting Socket	17.	AP 2215	5	Decal, BLU-JET, 3" x 8",
1c.	BP 3001	2	Hex Nut, 3/8-16, Grade 2, Plated	18.	AP 2216	3	Decal, BLU-JET, Small, 1-1/2" x 4"
1d.	BP 3002	2	Lock Washer, 3/8", Plated	19.	AP 2222	1	Decal, Warning Stand Clear of Tongue
1e.	BP 3045	1	U-Bolt, 3/8-16 x 6" x 5", Plated	20.	AP 2223	<u>1</u>	Decal, Limited Warranty, 4-1/4" x 9-1/4" (Discontinued)
2.	<b>AAM 2423</b>	1	Transport chain Kit, 30,000 #	21.	AP 2231	1	Decal, FEMA, 2-1/2" x 1-1/2"
2a.	AP 2195	1	Transport chain, 30,000#, 7/16"	22.	AP 2234	2	Decal, Danger Stand Clear Falling Wing
2b.	AP 2469	1	Decal, Safety Chain	23.	AP 2282-1	8	Hose Retainer, 4" x 6"
2c.	BM 3498	1	Bushing, safety chain 1-3/4" OD x	24.	AP 2483	1	Decal, Danger Falling From Equipment
			1.125 ID x 4"		AP 2688	1	Paint, Spray Can, Blue12 oz
2d.	BP 3051	1	Pin, 1" x 6", hitch. plated		AP 2693	1	Paint, Spray Can, Black 12 oz
2e.	BP 3511	1	Pin, cotter, 3/16" x 1-3/4"	25.	AP 2711	4	Snap Ring, 1-1/4" External, Heavy Duty
3.	AAM 2425	1	Safety Tank, Toolbox				, , ,
3a.	AP 2215	1	Decal, BLU-JET, 3" x 8"	26.	AP 2828	1	Electrical Harness, 15'
3b.	BP 3214	2	U-bolt, 3/8"-16 x 4-1/16" x 7"	27.	AP 2914	1	Decal, Warning, High Pressure Fluid
			LT hose T, plate	28.	BM 3548	2	Pin, 1-1/4" x 4-3/4" Plated, Useable,
	PKG00040						Double Grooved
3c.	AM 2136	2	Bracket, tank mounting, 9 gallon				
3d.	AP 2137	1	Tank, 9 gallon, Fresh Water Safety	29.	BM 3604	4	Pin, 1-3/4" x 14-3/8" Usable,
3e.	BP 3001	4	Nut, hex, 3/8"-16, grade 2, plated				Anti-rotation Hook
3f.	BP 3002	4	Washer, lock, 3/8", plated	30.	BP 3001	4	Hex Nut, 3/8-16, Grade 2, Plated
3g.	BP 3108	6	Hex cap screw, 5/16"-18 x 1",	31.	BP 3002	4	Lock Washer, 3/8", Plated
			grade 5, plated	32.	BP 3003	1	Hex Lock Nut, 3/8-16, Grade 2, Plated
3h.	BP 3158	6	Washer, lock, 5/16", plated	33.	BP 3015	2	Flat Washer, 3/8", Plated
3i.	BP 3159	6	Washer, flat, 5/16", plated	34.	BP 3034	32	Hex Nut, 3/4-10, Grade 2, Plated
4.	AAM 2639	1	Manual Holder w/ 6" x 4	35.	BP 3035	32	Lock Washer, 3/4", Plated
4a.	AM 7640	1	Bracket, mounting, manual holder	36.	BP 3038	4	Hex Nut, 5/8-11, Grade 2, Plated
4b.	AP 4254	1	Manual holder, Black, 01-315	37.	BP 3039	4	Lock Washer, 5/8", Plated
4c.	BP 3001	3	Nut, hex, 3/8"-16, grade 2, plated	38.	BP 3045	2	U-Bolt, 3/8-16 x 6"x 5", Plated
4d.	BP 3002	3	Washer, lock, 3/8", plated,	39.	BP 3051	2	Pin, 1"x 6", Hitch, Plated
4c.	BP 3006	1	Hex cap screw, 3/8"-16 x 1",			8	
			grade 5, plated	40.	BP 3072	_	Grease Zerk, 1/4-28
4d.	BP 3045	1	U-bolt, 3/8"-16 x 6" x 5", plated	41.	BP 3096	1	Hex Cap Screw, 3/8-16 x 2-1/2",
5.	AM 2090	2	Bracket, Depth Collar & Lockup			_	Grade 5, Plated
_			Storage	42.	BP 3099	2	U-Bolt, 5/8-11 x 6" x 6", Plated
6.	AM 2518	1	Jack, 9TW 25DL TMC Blue	43.	BP 3140	12	Hex Cap Screw, 3/4-10 x 2-1/2",
7.	AM 2526	1	Crank W/Grip, 90°, Long, Blue				Grade 2, Plated
8.	AM 3038	2	Bolt-On Primary Wing Stop	44.	BP 3141	12	Hex Cap Screw, 3/4-10 x 3",
9.	AM 3383	2	Rocker Plate, LR/LW,				Grade 2, Plated
40	A B A 0005		New Style 05/03	45.	BP 3208	4	U-Bolt, 3/4-10 x 6"W x 5-3/4"L, Plated
10.	AM 3385	1	Primary Wing, 6'-5", LH	46.	BP 3249	4	Machinery Bushing, 1-7/8"
44	A B.4. 0000		w/Down Flex				OD x 1-1/4" ID, 14 GA
11.	AM 3386	1	Primary Wing, 6'-5", RH	47.	BP 3511	2	Pin, Cotter, 3/16" x 1- 3/4"
40	A B # 0000		w/Down Flex	48.	BP 3519	4	Pin, Roll, 3/8" x 2-1/2", Plain
12.	AM 3392	1	Tongue, LR II, RH, Weighted	49.	DP 4086	8	Cable Tie, 11-3/8" Standard
13.	AM 3393	1	Tongue, LRII LH, Weighted	50.	DP 4296	12	Cable Tie, 33"
14.	AM 3394	1	Frame, LR II, 13'6"		nal Hitch		
1 <i>E</i>	AM 2205	4	StripTill Center Section	51.	AM 2144	1	Clevis Hitch
15.	AM 3395	1	Tongue connector, LR II	52.	AP 2850	1	Perfect Hitch CAT. III
			StripTill Frame				
				53.	AP 2864	1	Perfect Hitch CAT. IV

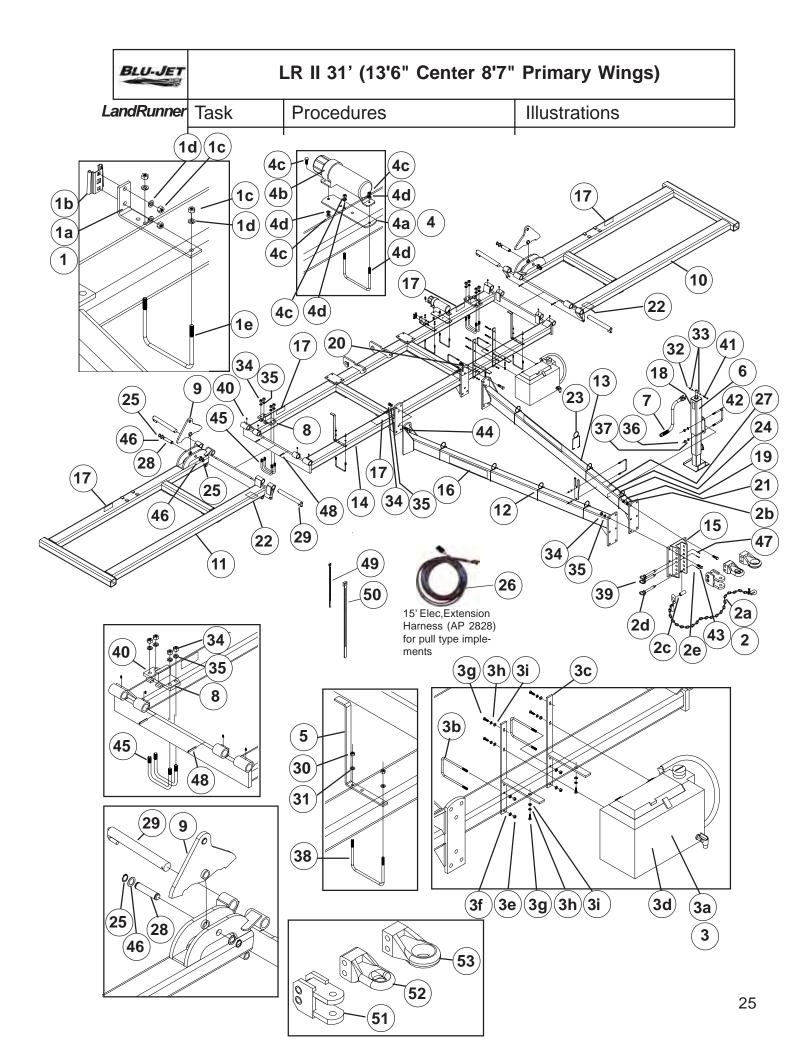




# LR II 31' (13'6" Center 8'7" Primary Wings)

LandRunner Task Procedures Illustrations

Ref. Part No. Req. Description	
1. AAM 2098 1 SMV Kit, 4"x 6" Ref. Part No. Req. Description	
1a. AM 4077 1 Bracket, SMV Mounting 16. AP 2206 2 Decal, LandRunner	
1b. AP 2543 1 SMV Mounting Socket 17. AP 2215 5 Decal, BLU-JET, 3" x 8",	
1c. BP 3001 2 Hex Nut, 3/8-16, Grade 2, Plated 18. AP 2216 3 Decal, BLU-JET, Small, 1-1/2	!" x 4"
1d. BP 3002 2 Lock Washer, 3/8", Plated 19. AP 2222 1 Decal, Warning Stand Clear of	
1e. BP 3045 1 U-Bolt, 3/8-16 x 6" x 5", Plated <u>20.</u> <u>AP 2223</u> <u>1 Decal, Limited Warranty, 4-1/4"</u>	_
2. AAM 2423 1 Transport chain Kit, 30,000 # 21. AP 2231 1 Decal, FEMA, 2-1/2" x 1-1/2"	•
2a. AP 2195 1 Transport chain, 30,000#, 7/16" 22. AP 2234 2 Decal, Danger Stand Clear Fa	Illing Wing
2b. AP 2469 1 Decal, Safety Chain 23. AP 2282-1 8 Hose Retainer, 4" x 6"	0 0
2c. BM 3498 1 Bushing, safety chain 1-3/4" OD x 24. AP 2483 1 Decal, Danger Falling From Ed	quipment
1.125 ID x 4" AP 2688 1 Paint, Spray Can, Blue12 oz	
2d. BP 3051 1 Pin, 1" x 6", hitch. plated AP 2693 1 Paint, Spray Can, Black 12 oz	
2e. BP 3511 1 Pin, cotter, 3/16" x 1-3/4" 25. AP 2711 4 Snap Ring, 1-1/4" External, He	
3. AAM 2425 1 Safety Tank, Toolbox	
3a. AP 2215 1 Decal, BLU-JET, 3" x 8" 26. AP 2828 1 Electrical Harness, 15'	
3b. BP 3214 2 U-bolt, 3/8"-16 x 4-1/16" x 7" 27. AP 2914 1 Decal, Warning, High Pressul	re Fluid
LT hose T, plate 28. BM 3548 2 Pin, 1-1/4" x 4-3/4" Plated, Us	
PKG00040 Double Grooved	
3c. AM 2136 2 Bracket, tank mounting, 9 gallon	
3d. AP 2137 1 Tank, 9 gallon, Fresh Water Safety 29. BM 3604 4 Pin, 1-3/4" x 14-3/8" Usable,	
3e. BP 3001 4 Nut, hex, 3/8"-16, grade 2, plated Anti-rotation Hook	
3f. BP 3002 4 Washer, lock, 3/8", plated 30. BP 3001 4 Hex Nut, 3/8-16, Grade 2, Plat	ed
3g. BP 3108 6 Hex cap screw, 5/16"-18 x 1", <b>31.</b> BP 3002 4 Lock Washer, 3/8", Plated	
grade 5, plated 32. BP 3003 1 Hex Lock Nut, 3/8-16, Grade	2, Plated
3h. BP 3158 6 Washer, lock, 5/16", plated <b>33.</b> BP 3015 2 Flat Washer, 3/8", Plated	
3i. BP 3159 6 Washer, flat, 5/16", plated 34. BP 3034 32 Hex Nut, 3/4-10, Grade 2, Plat	ed
4. AAM 2639 1 Manual Holder w/ 6" x 4 35. BP 3035 32 Lock Washer, 3/4". Plated	
4a. AM 7640 1 Bracket, mounting, manual holder 36 BP 3038 4 Hex Nut 5/8-11 Grade 2 Plat	ted
4b. AP 4254 1 Manual holder, Black, U1-315 37 BP 3030 4 Lock Washer 5/8" Plated	
4C. BP 3001 3 Nut, flex, 3/6 - 16, grade 2, plated 38 RP 3045 2 LL-Rolt 3/8-16 v 6"v 5" Plated	1
40. BP 3002 3 Washer, lock, 3/6 , plated, 30 BP 2051 2 Bin 1"x 6" Hitch Plated	•
40. BD 2072 9 Cross Zork 4/4 29	
grade of praced	/ <b>&gt;</b> "
	<b>Z</b> ,
	d
Storage 42. BP 3099 2 U-Bolt, 5/8-11 x 6" x 6", Plate	
6. AM 2518 1 Jack, 9TW 25DL TMC Blue 43. BP 3140 12 Hex Cap Screw, 3/4-10 x 2-1/	Ζ΄,
7. AM 2526 1 Crank W/Grip, 90°, Long, Blue Grade 2, Plated	
8. AM 3038 2 Bolt-On Primary Wing Stop 44. BP 3141 12 Hex Cap Screw, 3/4-10 x 3",	
9. AM 3383 2 Rocker Plate, LR/LW, Grade 2, Plated  New Style 05/03 45 BP 3208 4 LI-Rolt 3/4-10 x 6"W x 5-3/4"	
40 AM 0004 4 Dalas are Miles at 0.271 111	∟, Plated
W/Down Flor	
14 AM 2202 4 Primary Wing 9' 7" BU	
11. AM 3382 1 Primary Wing, 8'-7", RH 47. BP 3511 2 Pin, Cotter, 3/16" x 1- 3/4" w/Down Flex	
48 BP 3519 4 PIN ROIL 3/8" ¥ 2-1/2" PIRIN	
12. AM 3392 1 Tongue, LR II, RH, Weighted 49. DP 4086 8 Cable Tie, 11-3/8" Standard	
13. AM 3393 1 Tongue, ERII LH, Weighted 50. DP 4296 12 Cable Tie, 33"	
StripTill Center Section Optional Hitch	





# **Nurse Tank Hitch Parts & Assembly**

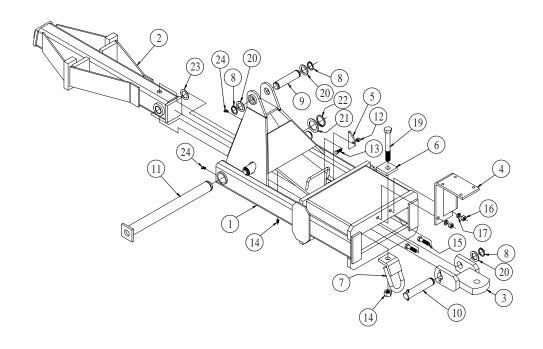
**LandRunner** Task

Procedures

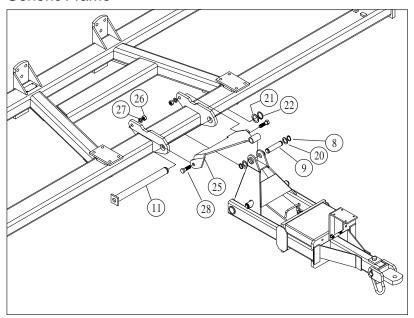
Illustrations

Ref.	Part No.	Req.	Description
<u>AAN</u>	<b>1 2624 Hitch</b>	n Asser	<u>nbly, Swing-Slide</u>
1.	AM 4530	1	Hitch Nurse Tank Main Frame AT5000
2.	AM 4533	1	Hitch Swing Slide Insert, Standard
2a.	AP2156	2	Nylon Bushing, 1-13/32" OD, x 1-1/4" ID, 1-1/4" OAL
3.	AM 4534	1	Hitch, Flipper, Standard Mtg. Nurse Tank Hitch
4.	AM 4535	1	SuperShooter Mounting, Nurse Tank Hitch
5.	AM 4539	1	Safety Latch
6.	AM 4540	1	Backing Plate Safety Chain Loop,
			Standard Nurse Tank
7.	AM 4541	1	Safety Chain Hook, Standard Nurse Tank, 96
8.	AP 2711	3	Snap Ring, 1-1/4" External, Heavy Duty
9.	BM 3548	1	Pin, 1-1/4" x 4-3/4" Plated Useable, Double Grooved
10.	BM 3549	1	Pin, 1-1/4" x -5/16" Usable Grooved W/Anti-Rotation
11.	BM 3550	1	Pin, 1-3/4" x 18-15/16" Useable, Grooved W/Head
12.	BP 3003	1	Nut, Hex Lock, 3/8-16 Grade 2 Plated
13.	BP 3006	1	Hex Cap Screw, 3/8-16 x 1" Grade 5 Plated
14.	BP 3027	1	Nut, Hex Lock, 3/4-10, Grade 2, Plated
15.	BP 3041	2	Hex Cap Screw, 1/2-13 x 2 Grade 5 Plated
16.	BP 3042	2	Nut, Hex, 1/2-13, Grade 2 Plated
17.	BP 3043	2	Washer, Lock 1/2" Plated
18.	BP 3072	1	Grease Zerk, 1/4-28
19.	BP 3146	1	Hex Cap Screw, 3/4-10 x 6" Grade 5 Plated
20.	BP3192	3	Machinery Bushing, 1-7/8" OD x 1-1/4" ID x 10 Gauge.
21.	BP 3205	1	Machinery Bushing, 2-1/2" x 1-3/4", 10 Gauge
22.	BP 3240	1	Snap Ring, 1-3/4" External
23.	BP 3249	1	Machinery Bushing, 1-1/4" ID x 1-7/8" OD. 14 Gauge
24.	BP 3257	2	Grease Zerk, 1/4-28, 65 Degree
<u>AAN</u>	<u> 12626</u>	<u>1</u>	<u>Hitch Assembly, LandRunner</u>
AAN	12624	1	Hitch Assembly, Swing-Slide
25.	AM 3396	1	Brace, Nurse Tank Hitch, LR II
26.	BP 3034	2	Nut, Hex, 3/4"-10, grade 2, plated
27.	BP 3035	2	Washer, Lock, 3/4", plated
28.	BP 3140	2	Hex cap screw, 3/4"-10 x 2-1/2", grade 5, plated





#### Generic Frame



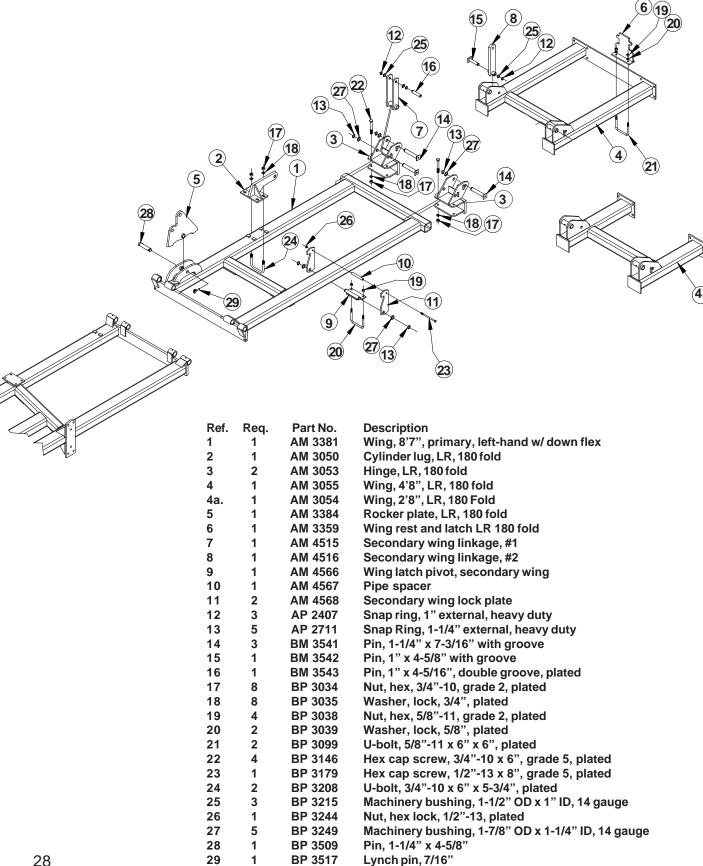


## 180 Degree Fold Assembly Left-hand

LandRunner

**Procedures** Task

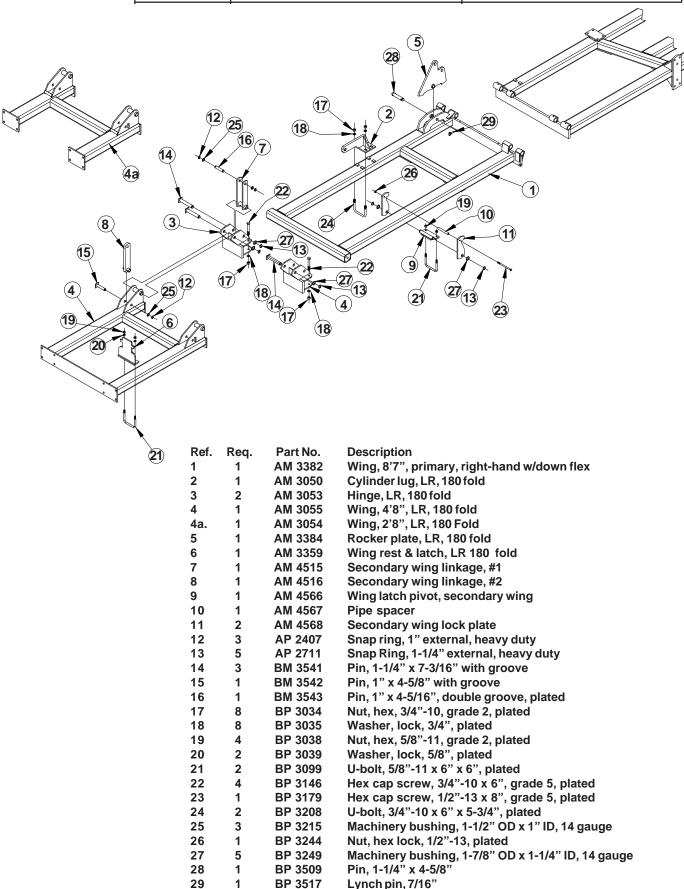
Illustrations





## 180 Degree Fold Assembly Right-hand

LandRunner Task Procedures Illustrations





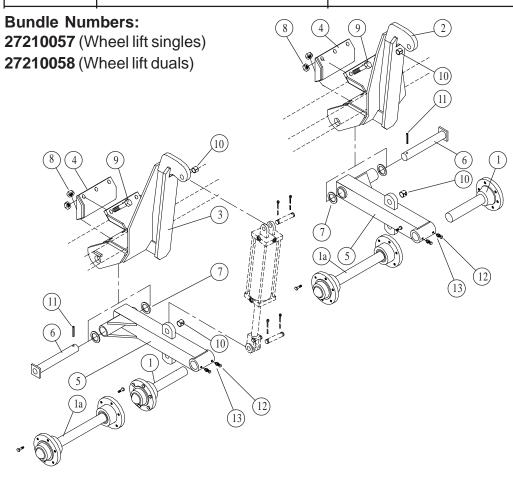
# Single/Dual Lift and Gauge Wheel

LandRunner

Task

Procedures

Illustrations



Ref. Part No.	Reg.	Description
1. AAM 2708	1 .	Assembly, Hub & Spindle, 783 Hub, 2"x 14"
1a. AAM 2710	1	Assembly, Hub & Spindle, 783 Hub, 2"x 24"
2. AM 5047	1	Bracket, Cylinder Upright, LH.
3. AM 5048	1	Bracket, Cylinder Upright, RH.
4. AM 5049	1	Bracket, Cylinder Upright Clamp.
5. AM 5052	1	Wheel Leg, 2" Spindle Loop.
6. BM 3810	1	Pin, 1-3/4"x 11-11/16" Usable W/AntiRotation
7. BP 3205	2	Machinery Bushing, 2-1/2"x 1-3/4", 10 GA.
8. BP 3275	6	Nut, Hex, 1-8, Grd. 8, Pltd.
9. BP 3290	6	Hex Cap Screw, 1-8 x 3", Grd. 8, Pltd.
10. BP 3516	2	Tension Bushing 1-1/4"x 1" ID x 1" OAL
11. BP 3519	1	Pin, Roll, 3/8"x 2-1/2", Plain
12. BP 3079	2	Set Screw, Sq Head, 5/8-11 x 1-3/4", Unpltd
13. BP3080	2	Nut, Hex Jam, 5/8-11

Quantities shown are for one lift or gauge wheel.



# Walking Tandem Lift and Gauge Wheel

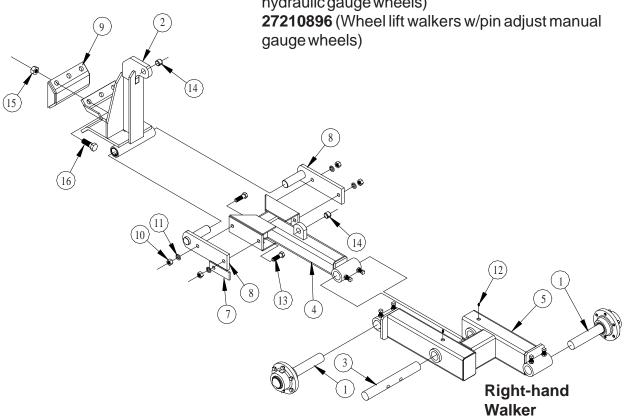
**LandRunner** Task

Procedures

Illustrations

#### **Bundle Numbers:**

27210112 Wheel lift walkers w/ walking tandem hydraulic gauge wheels)



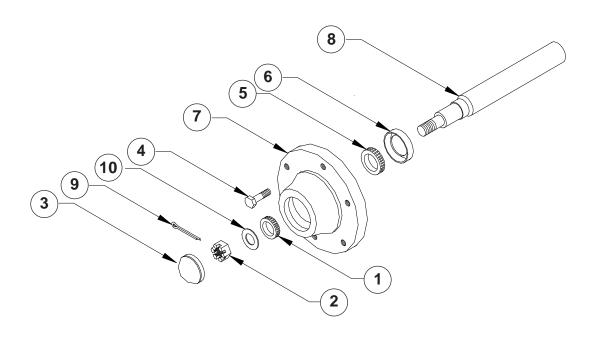
Ref.	Part No.	Req.	Description
1.	<b>AAM 2708</b>	8	Assembly, Hub & Spindle, 783 Hub, 2" x 14"
2.	AM 3346	4	Cylinder, Upright
3.	AM 5023	4	Pivot Pin, Tandem, 2"
4.	AM 5030	4	Heavy Duty Wheel Leg Deluxe Walker, 2" Spindle
5.	AM 3399	2	Walker Left-Hand LRII
6.	AM 3398	2	Walker Right-Hand LRII
7.	AM 5033	2	Plate, Deluxe Walker Stop (Gauge Wheels Only)
8.	AM 5037	8	Bracket, Pivot Arm Heavy Duty
9.	AM 5049	4	Bracket, Cylinder Upright Clamp, Black
10.	BP 3034	16	Nut, Hex, 3/4"-10, Grd. 2, Plated.
11.	BP 3035	16	Washer, Lock, 3/4", Pltd.
12.	BP3072	6	Grease Zerk, 1/4"-28
13.	BP 3140	16	Hex Cap Screw, 3/4"-10 x 2-1/2", Grd. 5, Plated.
14.	BP3516	8	Tension Bushing, 1-1/4" x 1" ID x 1", Oal
15.	BP3275	24	Nut, Hex, 1"-8, Grd. 8, Plated
16.	BP 3290	24	Hex Cap Screw, 1"-8 x 3", Grd, 8, Plated



# (AAM 2708) 783 Hub 2" x 14" Spindle

**LandRunner** Task

Task Procedures Illustrations



Ref.	Part No.	Req.	Description
1.	AP 2023	1	Bearing Cone, LM 67048
2.	AP 2028	1	Nut, Spindle, 7/8"-14
3.	AP 2048	1	Hub Cap, 1513
4.	AP 2049	6	Wheel Bolt, 1/2"-20 x 1
5.	AP 2082	1	Bearing Cone, LM 501349
6.	AP 2083	1	Grease Seal, CR 18823
7.	AP 2120	1	Hub With/Cups, 6 Bolt, 6" BC, 4.62" Pilot, 783 Hub
8.	AP 2172	1	Spindle, 2" x 14" S7135-I-00
9.	AP 2426	2	Pin, Cotter, 5/32" X 1-3/4"
10.	AP 2427	2	Washer, Spindle, 2" x 15/16" x .164

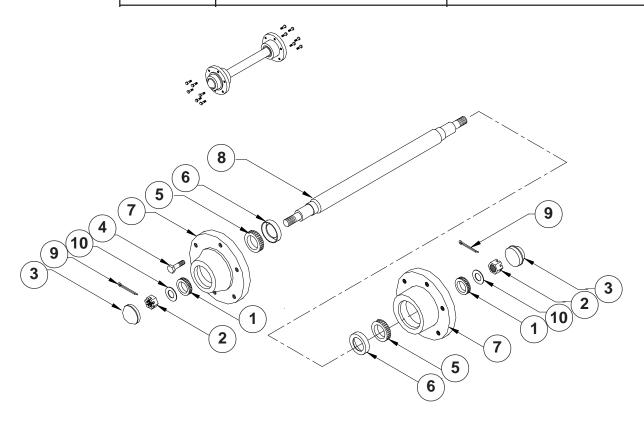


# (AAM 2710) 783 Hub 2" x 24"Dual Spindle

**LandRunner** Task

ask Procedures

Illustrations



Ref.	Part No.	Req.	Description
1.	AP 2023	2	Bearing cone, LM 67048
2.	AP 2028	2	Nut, spindle, 7/8"-14
3.	AP 2048	2	Hub cap, 1513
4.	AP 2049	12	Wheel bolt, 1/2"-20 x 1
5.	AP 2082	2	Bearing cone, LM 501349
6.	AP 2083	2	Grease seal, CR 18823
7.	AP 2120	2	Hub with/cups, 6 bolt, 6" BC, 4.62" pilot, 783 hub
8.	AP 2173-1	1	Spindle, 2C x 24" DE, with countersunk holes
9.	AP 2426	2	Pin, cotter, 5/32" X 1-3/4"
10.	AP 2427	2	Washer, spindle, 2 x 15/16" x .164

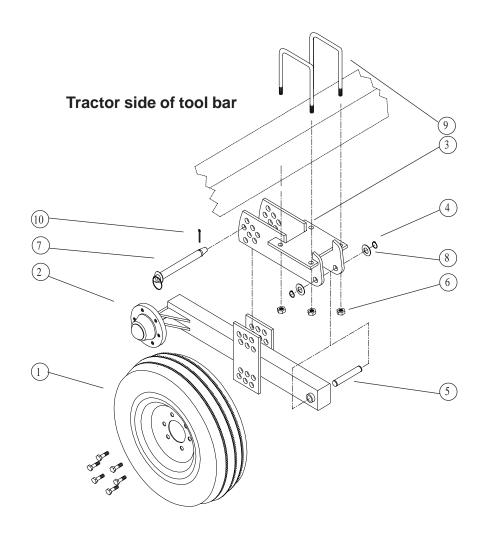


# Gauge Wheel With Pin Adjust & 25 x 7.50 x 15 Tire & Rim

LandRunner

Task Procedures

Illustrations

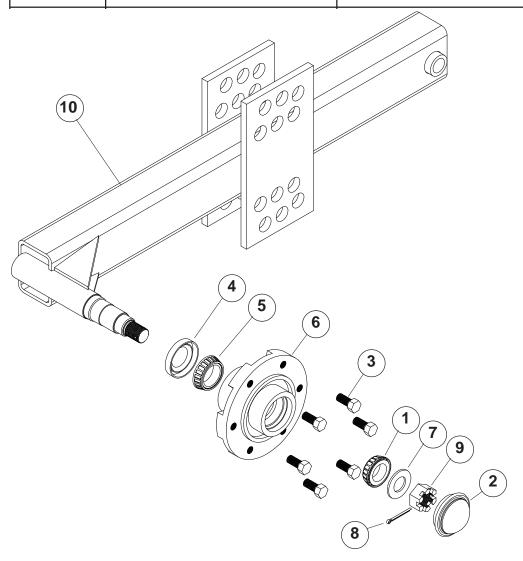


Ref.	Part No.	Req.	Description
1.	<b>AAM 2768</b>	2	Wheel 25x 7.50-15, 4 ply 15 x 6 x 6 White
2.	AM 24024	2	ST II Gauge Wheel Leg Assembly
3.	AM 24025	2	ST II Gauge Wheel Tool Bar Mount Assembly
4.	AP 2407	4	Snap Ring 1" External Heavy Duty
5.	BM 3650	2	ST II Gauge Wheel Leg Pivot Pin
6.	BP 3034	8	Hex Nut 3/4" - 10 Plated
7.	BP 3051	2	Pin-1" x 6 1/4"
8.	BP 3215	4	1" 14Ga. Machine Bushing
9.	BP 3208	4	U-Bolt 3/4"-10 x 6W x 5-3/4"L Plated
10.	BP 3511	2	3/16" x 1-3/4" Cotter Key



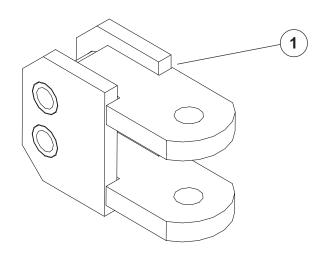
# AM 24024 Hub and Spindle Assembly

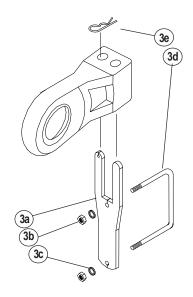
LandRunner Task Procedures Illustrations

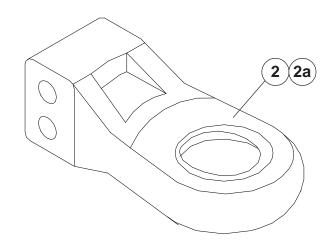


Ref.	Part No.	Req.	Description
1.	AP 2023	1	Bearing cone, LM 67048
2.	AP 2048	1	Hub, Cap, 1513
3.	AP 2049	6	Wheel bolt, 1/2"-20
4.	AP 2066	1	Grease seal, CR 16289
5.	AP 2078	1	Bearing cone, JL 69349
6.	AP 2123	1	Hub with/cup, 6 bolt, 611301-6
7.	AP 2146	1	Washer, spindle, 2" x 1-1/16" x .134
8.	AP 2426	1	Pin, cotter, 5/32" x 1-3/4"
9.	AP 2811	1	Nut, spindle, 1"-14
10.	EM 3700	1	Weldment, gauge wheel leg, pin adjust

	BLU-JET			Hitches		
LandRunner		Task	Procedures		Illustrations	

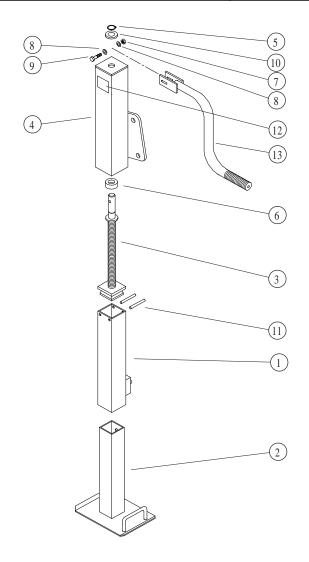






Part No.	Req.	Description
AM 2144	1	Fabricated Truck Hitch
AP 2864	1	Cat. IV Heat Treated Cast Wheatland Hitch 250-400+ HP 2" Pin
AP 2850	1	Cat. III Heat Treated Cast Wheatland Hitch 110-250 HP 1-1/2" Pin
nal		
<b>AAM 2424</b>	1	Bracket, Second Hitch Storage
AM 2145	1	Bracket, Hitch Storage
BP 3001	2	Nut, Hex, 3/8"-16 Grd. 2 Pltd.
BP3002	2	Washer, Lock, 3/8", Pltd.
BP 3045	1	U-bolt, 3/8"-16 x 6"x 5", Pltd.
BP 3500	1	Pin, Hair Clip, 3/16"
	AM 2144 AP 2864 AP 2850 nal AAM 2424 AM 2145 BP 3001 BP3002 BP 3045	AM 2144 1 AP 2864 1 AP 2850 1  nal  AAM 2424 1 AM 2145 1 BP 3001 2 BP3002 2 BP 3045 1





Ref.	Part No.	Req.	Description
Assy	AM 2518	_	9TW-25 DL Topwind DL Jack
1.	AM 2524	1	Intermediate Tube With Plunger 12 SW
2.	AM 2525	1	Dropleg With Pad & Handle 12 SW 25 DL
3.	AM 2534	1	Screw Assembly 4" for 9TW-13
4.	AM 2539	1	Top With/ Bolt On Mounting 4" SD2100F
5.	AP 2407	1	Snap Ring 1" Ring 1" External Heavy Duty
6.	AP 2410	1	Thrust Bearing Nice 609
7.	BP3003	1	Hex Nut Lock 3/8"-16 Gd. 2 Plated
8.	BP 3015	2	Flat Washer 3/8" Plated
9.	BP3096	1	Hex Cap Screw 3/8"-16 x 2 1/2" Gd. 5 Plated
10.	EM 1736	1	2"-1/2" x 1.010 ID x 1/4" Bearing Seat Purchased
11.	EM 1739	2	1/2" CRR x 3 9/16 DL Jack Nut Retainer
12.	EM 3016	1	9000# Jack Label
13.	AM 2526	1	Handle With Grip (Not included with jack assembly.)

**NOTE:** Handle not included in AM2518 assembly.



### **Hydraulic Gauge Wheel Jack Adjust**

#### LandRunner

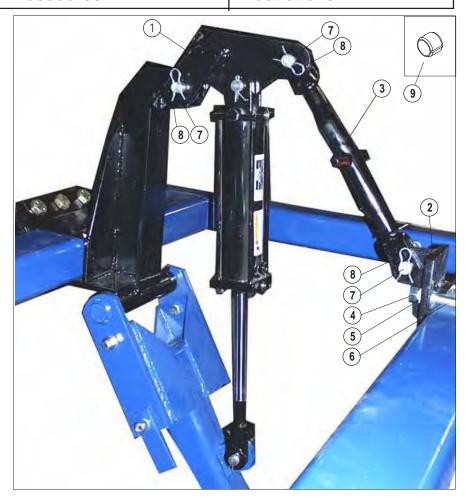
Task

**Procedures** 

Illustrations

Hydraulic gauge wheel jack adjust parts

Bundle Number: 27210923



Ref.	Part No.	Req.	Description
1.	AM 2133	2	Bracket, knuckle
2.	AM 3058	2	Bracket, ratchet jack
3.	AP 2896	2	Jack, implement, adjustable, TL1-5-3
4.	BP 3034	8	Nut, hex, 3/4"-10, grade 2, plated
5.	BP 3035	8	Washer, lock, 3/4" plated
6.	BP 3047	4	U-bolt, 3/4"-10 x 4"W x 7-3/4", plated
7.	BP 3403	6	Pin, clevis, 1" x 2-3/4" useable
8.	BP 3511	12	Pin, cotter, 3/16" x 1-3/4"
9.	BP 3516	4	Tension bushing, 1-1/4 x 1" x 1" OAL

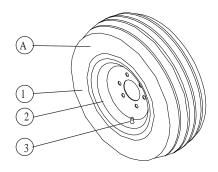


Four (BP 3176) 3/4"-10 x 8-1/2" hex cap screws are included with parts. The 3/4" x 8-1/2" hex cap screw will replace the u-bolts if a stagger bracket aligns with the wheel leg upright. The hex cap screw will be inserted through the stagger bracket into the jack bracket and secured with the 3/4" lock washers and 3/4" hex nuts.

BLU-JET	_	draulic Gauge Whee	
LandRunner	Task	Procedures	Illustrations
•	Mounting adjustable gauge	Unfold toolbar wings and lower machine.  Relieve the pressure on the	
	wheel	cylinder pins.  3. Remove the top cylinder pin.	
	CAUTION To Prevent Serious Injury: Install with provided hardware only.		
	Installing knuckle bracket	4. Position (1) (AM 2133) knuckle bracket on wheel leg upright and secure with (7) (BP 3403) clevis pin 1" x 2-3/4" and (8) (BP 3511) cotter pins 3/16" x 1-3/4".	
		5. Install (9) (BP 3516) 1-1/4" x 1" x 1" tension bushing in bottom hole of knuckle bracket.	
•	Jack bracket	6. 2. AM 3058 (1) Bracket, jack 4. BP 3034 (4) Hex nut, 3/4"-10	2
	parts	5. BP 3035 (4) Washer, lock 3/4" 6. BP 3047 (2) U-bolt, 3/4"-10 x 4"W x 7-3/4" plated	5 6

BLU-JET	Hydrau	lic Gauge Wheel Jac	k Adjust Assembly		
LandRunner LandRunner	Task	Procedures	Illustrations		
	Mounting jack bracket	<ol> <li>Position the (2) (AM 3058) ratchet jack attachment bracket on front tube of the wing. Install (6) (BP 3047) 3/4" x 4"W x 7-3/4" u-bolts, (5) (BP 3035) 3/4" lock washers and (4) (BP 3034) 3/4" hex nuts. Align the bracket with the wheel leg and tighten hex nuts.</li> <li>The cylinder weldment is mounted to the top with walkers.</li> <li>The cylinder weldment is mounted to the bottom with singles and duals.</li> <li>Install (9) (BP 3516) 1-1/4" x 1" x 1" tension bushing in cylinder weldment.</li> </ol>	tension bushing  Singles and Duals  Tension bushing		
	Attaching adjustable implement jack	9. Mount (3) (AP 2896) adjustable implement jack with (7) (BP 3403) clevis pin 1" x 2-3/4" and (8) (BP 3511) cotter pins 3/16" x 1-3/4".			
•	Attaching cylinder to knuckle bracket	10. Reattach cylinder to knuckle bracket.			
	NOTE: Retact jack before charging cylinders.	11. Retract jack before charging cylinders on new assembly.			





Ref.Part No. Req. Description

A. AAM 2757 - Wheel 11L-15, 8 Ply 1. AP 2013 1 Tire, 11L-15, 8 Ply, Tube-

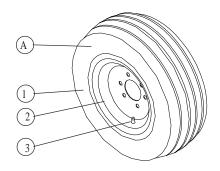
less

2. AP 2016 1 Rim, 15"x 8"x White

3. AP 2160 1 Valve Stem

11L-15, 8 Ply, Single, Duals & Walkers

Inflate 11L-15, 8Ply, tire <u>36 psi. Max.</u>
Max speed 25 m.p.h.



Ref.Part No. Req. Description

A. AAM 2756 - Wheel 11L-15, 12 Ply

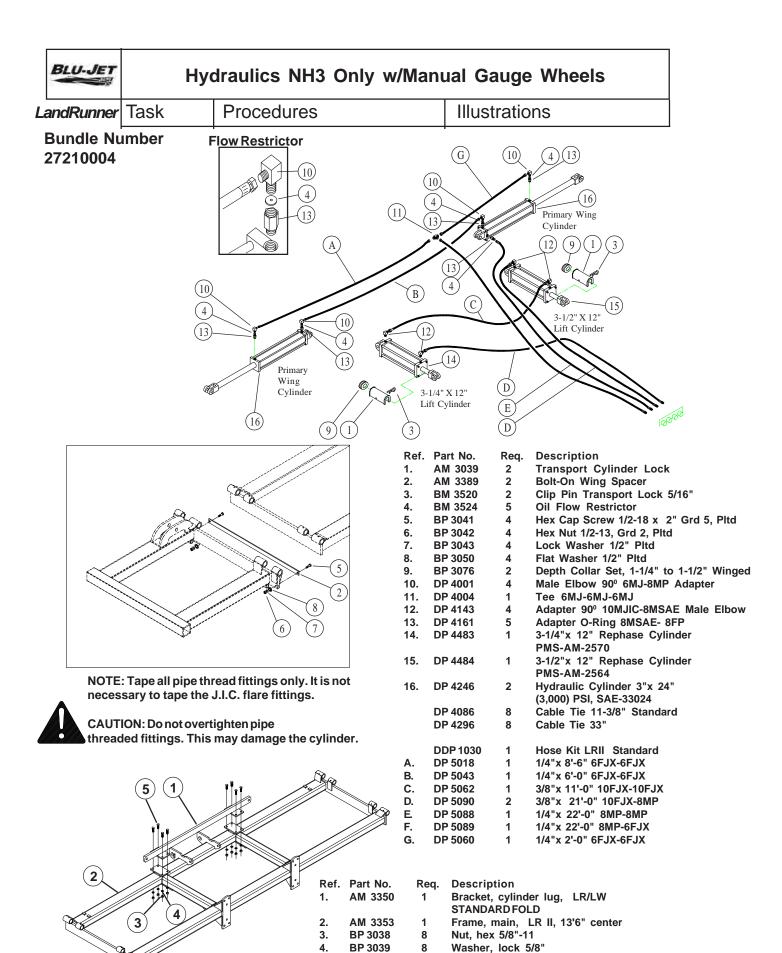
1. AP 2018 1 Tire, 11L-15, 12 Ply, Tubeless

2. AP 2016 1 Rim, 15"x 8"x 6" White

3. AP 2160 1 Valve Stem

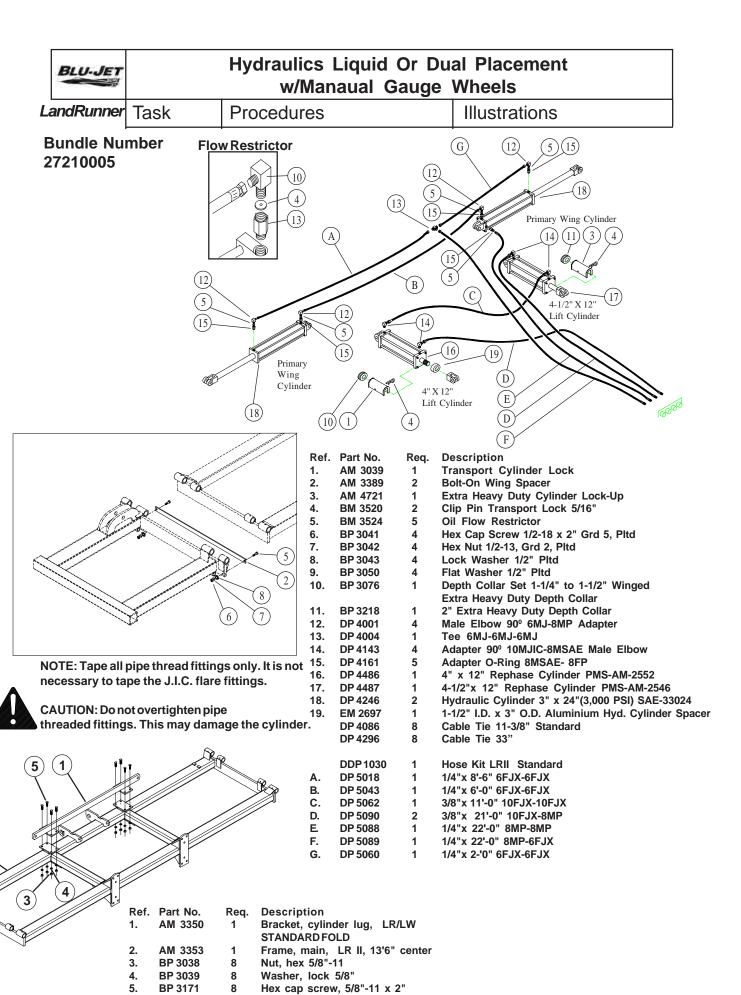
11L-15, 12 Ply Duals & Walkers

Inflate 11L-15, 12 Ply, tire <u>52 psi. Max.</u> Max speed 25 m.p.h.



**BP 3171** 

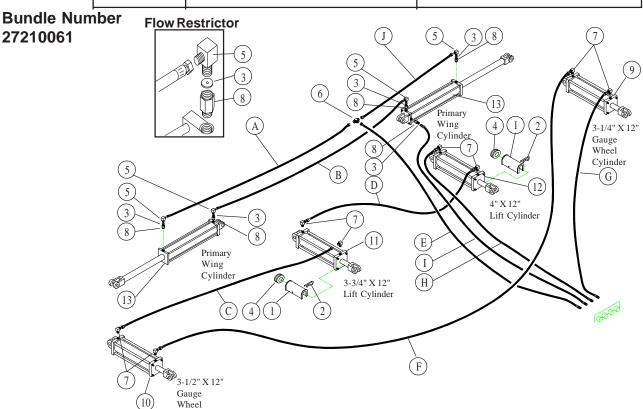
Hex cap screw, 5/8"-11 x 2"



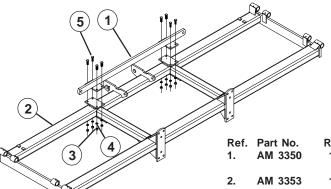


#### **Hydraulics NH3 Only With Hydraulic Gauge Wheels**

Illustrations **Procedures LandRunner** Task



Ref.	Part No.	Req.	Description				
1.	AM 3039	2	Transport Cylinder Lock	12.	DP 4486	1	4" x 12" DA Rephase Cylinder
2.	BM 3520	2	Clip Pin Transport Lock 5/16" 1018 CRR x 12"				PMS-AM-2552
3.	BM 3524	5	Oil Flow Restrictor	13.	DP 4246	2	Hydraulic Cylinder 3" x 24" (3000) PSI
4.	BP 3076	2	Depth Collar Set 1-1/4" to 1-1/2" Winged				SAE-33024
5.	DP 4001	4	Male Elbow 90 Degree 6MJ-8MP Adapter		DP 4086	10	Cable Tie 11 3/8" Standard
6.	DP 4004	1	Tee 6MJ-6MJ-6MJ		DP 4296	10	Cable Tie 33"
7.	DP 4143	8	Adapter 90 Degree 10MJIC-8MSAE				
			Male Elbow	DDP	1041	1	Hose Kit LRII With Hydraulic Gauge Wheel
8.	DP 4161	5	Adapter O-Ring 8MSAE-8FP	Α	DP 5038	1	1/4" x 9'0" 6FJX-6FJX Ends
9.	DP 4483	1	3-1/4" x 12" Rephase Cylinder	В	DP 5073	1	1/4" x 6'6" 6FJX-6FJX Ends
			PMS-AM-2570	С	DP 5074	1	3/8" x 13'6" 10FJX Ends
10.	DP 4484	1	3-1/2" x 12" Rephase Cylinder	D	DP 5062	1	3/8" x 11' 0" 10FJX Ends
			PMS-AM-2564	Ε	DP 5089	1	1/4" x 22'0" 8MP-6FJX Ends
11.	DP 4485	1	3-3/4" x 12" DA Rephase Cylinder	F	DP 5075	1	3/8" x 31' 0" 10FJX Ends
			PMS-AM-2558	G	DP 5091	1	3/8" x 32' 0" 10FJX-8MP Ends
		$\overline{}$	. De	Н	DP 5090	1	3/8" x 21'0" 10FJX-8MP Ends



Cylinder

NOTE: Tape all pipe thread fittings only. It is not necessary to tape the J.I.C. flare fittings.

CAUTION: Do not overtighten pipe threaded fittings. This may damage the cylinder.

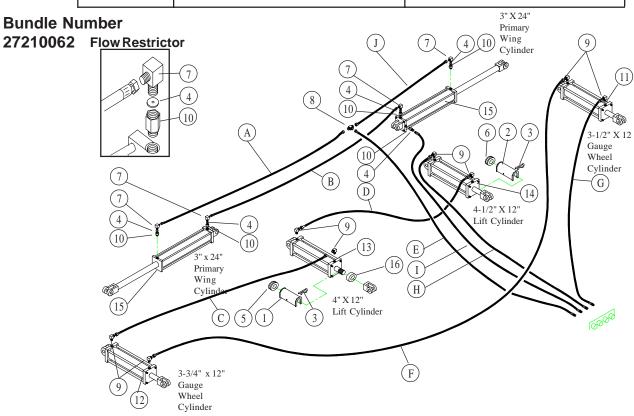
Description Req. Bracket, cylinder lug, LR/LW STANDARD FOLD Frame, main, LR II, 13'6" center BP 3038 3. 8 Nut, hex 5/8"-11 4. **BP 3039** 8 Washer, lock 5/8" Hex cap screw, 5/8"-11 x 2" 5.

BP 3171

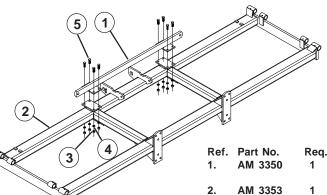


### Hydraulics Liquid Or Dual With Hydraulic Gauge Wheels

LandRunner Task Procedures Illustrations



Ref.	PMS-AW-255	2 Req.	Description				
1.	AM 3039	1	Transport Cylinder Lock	14.	DP 4487	1	4-1/2" x 12" DA Rephase Cylinder
2.	AM 4721	1	Heavy Duty Cylinder Lock-Up				PMS-AM-2546
3.	BM 3520	2	Clip Pin Transport Lock 5/16" 1018 CRR x 12"	15.	DP 4246	2	Hydraulic Cylinder 3" x 24"
4.	BM 3524	5	Oil Flow Restrictor				(3000) PSI SAE-33024
5.	BP 3076	1	Depth Collar Set 1-1/4" to 1-1/2" Winged	16.	EM2697	1	5/16" Hydraulic Cylinder Spacer
6.	BP 3218	1	Depth Collar Set, 1-3/4" to 2", Winged		DP 4086	10	Cable Tie 11 3/8" Standard
7.	DP 4001	4	Male Elbow 90 Degree 6MJ-8MP Adapter		DP 4296	10	Cable Tie 33"
8.	DP 4004	1	Tee 6MJ-6MJ-6MJ				
9.	DP 4143	8	Adapter 90* 10MJIC-8MSAE Male Elbow		DDP 1041	1	Hose Kit LRII With Hydraulic
10.	DP 4161	5	Adapter O-Ring 8MSAE -8FP				Gauge Wheel
11.	DP 4484	1	3-1/2" x 12" Rephase Cylinder	Α	DP 5038	1	1/4" x 9'0" 6FJX-6FJX Ends
			PMS-AM-2564	В	DP 5073	1	1/4" x 6'6" 6FJX-6FJX Ends
12.	DP 4485	1	3-3/4" x 12" DA Rephase Cylinder	С	DP 5074	1	3/8" x 13'6" 10FJX Ends
			PMS-AM-2558	D	DP 5062	1	3/8" x 11' 0" 10FJX Ends
13.	DP 4486	1	4" x 12" DA Rephase Cylinder	Е	DP 5089	1	1/4" x 22'0" 8MP-6FJX Ends
				F	DP 5075	1	3/8" x 31' 0" 10FJX Ends
	- 0		₩	G	DP 5091	1	3/8" x 32' 0" 10FJX-8MP Ends
	<b>(5) (1)</b>	<b>1</b>		Н	DP 5090	1	3/8" x 21'0" 10FJX-8MP Ends
	<b>4</b>			I	DP 5088	1	1/4" x 22'0" 8MP Ends
	\ \			J	DP 5060	1	1/4" x 2' 0" 6FJX Ends
	. j. /	/ <b>{</b> *		NOT	E-Tapo all r	sino th	road fittings only. It is not



3.

4.

NOTE: Tape all pipe thread fittings only. It is not necessary to tape the J.I.C. flare fittings.

threaded fittings. This may damage the cylinder.

CAUTION: Do not overtighten pipe

Part No. AM 3350	Req. 1	Description Bracket, cylinder lug, LR/LW STANDARD FOLD
AM 3353	1	Frame, main, LR II, 13'6" center
BP 3038	8	Nut, hex 5/8"-11
BP 3039	8	Washer, lock 5/8"
BP 3171	8	Hex cap screw, 5/8"-11 x 2"



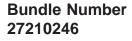
#### Hydraulics NH3 w/ Hydraulic Gauge Wheel

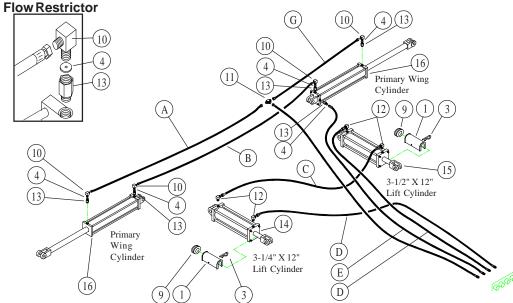
LandRunner

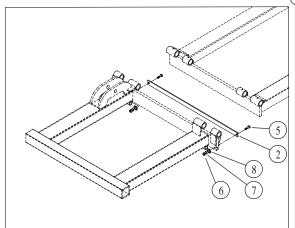
Task

**Procedures** 

Illustrations

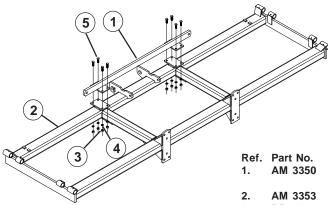






NOTE: Tape all pipe thread fittings only. It is not necessary to tape the J.I.C. flare fittings.

CAUTION: Do not overtighten pipe threaded fittings. This may damage the cylinder.



Ref. Part No. Req. Description AM 3039 Transport Cylinder Lock 1. AM 3389 **Bolt-On Wing Spacer** BM 3520 Clip Pin Transport Lock 5/16" 3. BM 3524 Oil Flow Restrictor 4. BP 3041 Hex Cap Screw 1/2-18 x 2" Grd 5, Pltd 5. **BP 3042** Hex Nut 1/2-13, Grd 2, Pltd 6. **BP 3043** Lock Washer 1/2" Pltd 7. 8. **BP 3050** Flat Washer 1/2" Pltd 1-1/4" to 1-1/2" Winged Depth Collar Set 9. **BP 3076** 2 10. DP 4001 Male Elbow 90° 6MJ-8MP Adapter **DP 4004** Tee 6MJ-6MJ-6MJ 11. Adapter 90º 10MJIC-8MSAE Male Elbow 12. DP 4143 13. **DP 4161** Adapter O-Ring 8MSAE- 8FP **DP 4483** 3-1/4"x 12" Rephase Cylinder 14. PMS-AM-2570 **DP 4484** 3-1/2"x 12" Rephase Cylinder 15. PMS-AM-2564 **DP 4248** Hydraulic Cylinder 4"x 24" (3,000) PSI SAE-34024 Cable Tie 11-3/8" Standard **DP 4086** DP 4296 Cable Tie 33" **DDP 1030** Hose Kit LRII Standard **DP 5018** 1/4"x 8'-6" 6FJX-6FJX 1/4"x 6'-0" 6FJX-6FJX B. **DP 5043** 

3/8"x 11'-0" 10FJX-10FJX 3/8"x 21'-0" 10FJX-8MP 1/4"x 22'-0" 8MP-8MP

1/4"x 22'-0" 8MP-6FJX

1/4"x 2'-0" 6FJX-6FJX

Description Req. Bracket, cylinder lug, LR/LW

STANDARD FOLD Frame, main, LR II, 13'6" center

C.

D.

E.

F.

DP 5062

**DP 5090** DP 5088

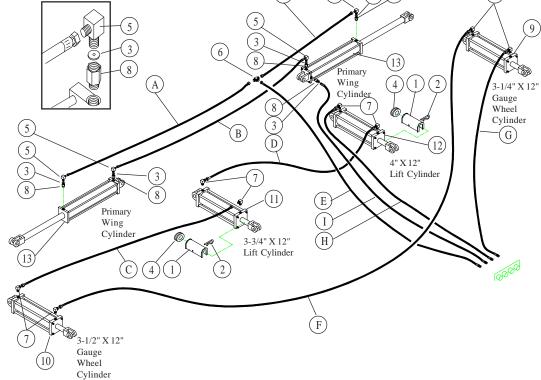
**DP 5089 DP 5060** 

3. **BP 3038** 8 Nut, hex 5/8"-11 4. BP 3039 Washer, lock 5/8" 8 5. **BP 3171** 

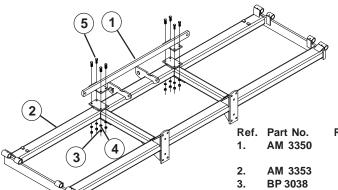
Hex cap screw, 5/8"-11 x 2"



Hydraulics NH3 Only With Hydraulic Gauge Wheels LR **Procedures** Illustrations **LandRunner** Task **Bundle Number** Flow Restrictor (5)27210247 Primary Wing Cylinde



			Cymidei				
Ref.		Req.	Description	13.	DP 4248	2	Hydraulic Cylinder 4" x 24" (3000) PS
1. 2. 3.	AM 3039 BM 3520 BM 3524	2 2 5	Transport Cylinder Lock Clip Pin Transport Lock 5/16" 1018 CRR x 12" Oil Flow Restrictor		DP 4086 DP 4296	10 10	Cable Tie 11 3/8" Standard Cable Tie 33"
4. 5.	BP 3076 DP 4001	2	1-1/4" to 1-1/2" Winged Depth Collar Set Male Elbow 90 Degree 6MJ-8MP Adapter		DDP 1041	1	Hose Kit LRII With Hydraulic Gauge Wheel
6. 7. Elbo	DP 4004 DP 4143 w	1 8	Tee 6MJ-6MJ-6MJ Adapter 90 Degree 10MJIC-8MSAE Male	A B	DP 5038 DP 5073	1 1	1/4" x 9'0" 6FJX-6FJX Ends 1/4" x 6'6" 6FJX-6FJX Ends
8. 9.	DP 4161 DP 4483	5 1	Adapter O-Ring 8MSAE-8FP 3-1/4" x 12" Rephase Cylinder PMS-AM-2570	C D E	DP 5074 DP 5062 DP 5089	1 1 1	3/8" x 13'6" 10FJX Ends 3/8" x 11' 0" 10FJX Ends 1/4" x 22'0" 8MP-6FJX Ends
10.	DP 4484	1	3-1/2" x 12" Rephase Cylinder PMS-AM-2564	F G	DP 5075 DP 5091	1 1	3/8" x 31' 0" 10FJX Ends 3/8" x 32' 0" 10FJX-8MP Ends
11.	DP 4485	1	3-3/4" x 12" DA Rephase Cylinder PMS-AM-2558	H I	DP 5090 DP 5088	1 1	3/8" x 21'0" 10FJX-8MP Ends 1/4" x 22'0" 8MP Ends
12.	DP 4486	1	4" x 12" DA Rephase Cylinder PMS-AM-2552	J	DP 5060	1	1/4" x 2' 0" 6FJX Ends



NOTE: Tape all pipe thread fittings only. It is not necessary to tape the J.I.C. flare fittings.



CAUTION: Do not overtighten pipe

threaded fittings. This may damage the cylinder.

Req. Description Bracket, cylinder lug, LR/LW STANDARD FOLD

1 Frame, main, LR II, 13'6" center

Nut, hex 5/8"-11 8 4. **BP 3039** 8 Washer, lock 5/8" **BP 3171** Hex cap screw, 5/8"-11 x 2"



# Hydraulics Liquid Or Dual Placement w/Manual Gauge Wheel

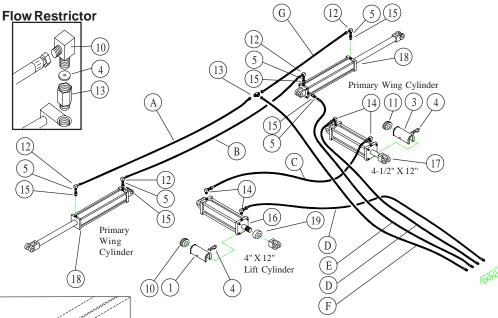
LandRunner

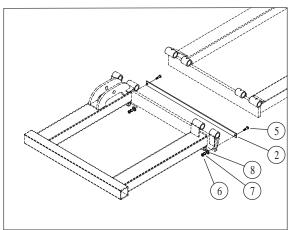
Task

**Procedures** 

Illustrations

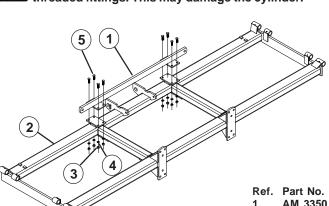
# Bundle Number 27210248





NOTE: Tape all pipe thread fittings only. It is not necessary to tape the J.I.C. flare fittings.

CAUTION: Do not overtighten pipe threaded fittings. This may damage the cylinder.



Description Ref. Part No. Req. AM 3039 Transport Cylinder Lock **Bolt-On Wing Spacer** 2. AM 3389 2 3. AM 4721 1 Extra Heavy Duty Cylinder Lock-Up 4. BM 3520 Clip Pin Transport Lock 5/16" 5. Oil Flow Restrictor BM 3524 BP 3041 Hex Cap Screw 1/2-18 x 2" Grd 5, Pltd 7. BP 3042 Hex Nut 1/2-13, Grd 2, Pltd **BP 3043** Lock Washer 1/2" Pltd 8. **BP 3050** Flat Washer 1/2" Pltd 9. BP 3076 1-3/4" to 1-1/2" Depth Collar Set 10. Extra Heavy Duty Depth Collar 1-3/4" to 2" Extra Heavy Duty Depth Collar Male Elbow 90° 6MJ-8MP Adapter 11. **BP 3218 DP 4001** 12. **DP 4004** Tee 6MJ-6MJ-6MJ 13. 1 DP 4143 Adapter 90º 10MJIC-8MSAE Male Elbow 14. 15. **DP 4161** Adapter O-Ring 8MSAE- 8FP 4" x 12" Rephase Cylinder PMS-AM-2552 16. **DP 4486** 17. **DP 4487** 4-1/2"x 12" Rephase Cylinder PMS-AM-2546 Hydraulic Cylinder 4" x 24" (3,000 PSI) SAE-34-24 18. **DP 4248** 1-1/2" I.D. x 3" O.D. Aluminium Hyd. EM 2697 19. Cylinder Spacer Cable Tie 11-3/8" Standard **DP 4086** 8 **DP 4296** Cable Tie 33" **DDP 1030** Hose Kit LRII Standard

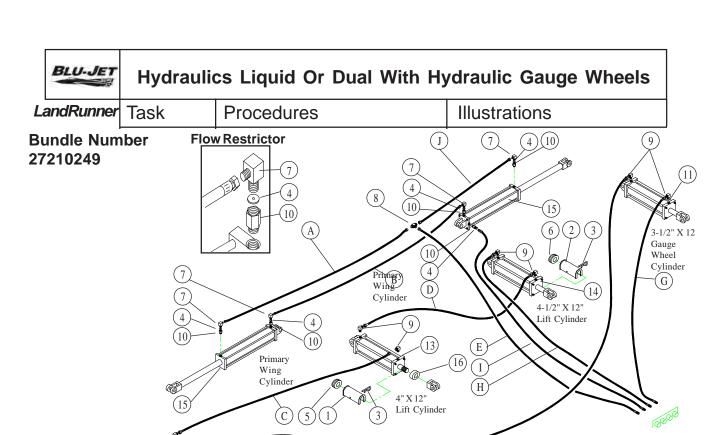
1/4"x 8'-6" 6FJX-6FJX 1/4"x 6'-0" 6FJX-6FJX DP 5018 DP 5043 B. C. DP 5062 3/8"x 11'-0" 10FJX-10FJX D. E. 3/8"x 21'-0" 10FJX-8MP DP 5090 1/4"x 22'-0" 8MP-8MP **DP 5088** F. G. **DP 5089** 1/4"x 22'-0" 8MP-6FJX **DP 5060** 1/4"x 2-'0" 6FJX-6FJX

Ref. Part No. Req. Description
1. AM 3350 1 Bracket, cylinder lug, LR/LW

STANDARD FOLD
2. AM 3353 1 Frame, main, LR II, 13'6" center
3. BP 3038 8 Nut, hex 5/8"-11

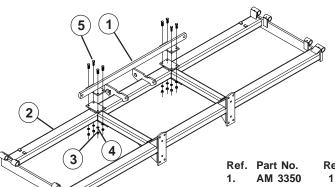
BP 3038
 BP 3039
 Washer, lock 5/8"
 BP 3171
 Hex cap screw, 5/8"-11 x 2"

48



Ref.	Part No.	Req.	Description				
1.	AM 3039	1	Transport Cylinder Lock	14.	DP 4487	1	4-1/2" x 12" DA Rephase Cylinder
2.	AM 4721	1	Heavy Duty Cylinder Lock-Up				PMS-AM-2546
3.	BM 3520	2	Clip Pin Transport Lock 5/16" 1018 CRR x 12"	15.	DP 4248	2	Hydraulic Cylinder 4" x 24" (3000) PSI
4.	BM 3524	5	Oil Flow Restrictor				SAE-34024
5.	BP 3076	1	1-1/4" to 1-1/2" Depth Collar Set Winged	16.	EM2697	1	5/16" Hydraulic Cylinder Spacer
6.	BP 3218	1	1-3/4" to 2" Extra Heavy Duty Depth Collar		DP 4086	10	Cable Tie 11 3/8" Standard
7.	DP 4001	4	Male Elbow 90 Degree 6MJ-8MP Adapter		DP 4296	10	Cable Tie 33"
8.	DP 4004	1	Tee 6MJ-6MJ-6MJ				
9.	DP 4143	8	Adapter 90* 10MJIC-8MSAE Male Elbow		DDP1041	1	Hose Kit LRII With Hydraulic Gauge Wheel
10.	DP 4161	5	Adapter O-Ring 8MSAE -8FP	Α	DP 5038	1	1/4" x 9'0" 6FJX-6FJX Ends
11.	DP 4484	1	3-1/2" x 12" Rephase Cylinder	В	DP 5073	1	1/4" x 6'6" 6FJX-6FJX Ends
			PMS-AM-2564	С	DP 5074	1	3/8" x 13'6" 10FJX Ends
12.	DP 4485	1	3-3/4" x 12" DA Rephase Cylinder	D	DP 5062	1	3/8" x 11' 0" 10FJX Ends
			PMS-AM-2558	Е	DP 5089	1	1/4" x 22'0" 8MP-6FJX Ends
13.	DP 4486	1	4" x 12" DA Rephase Cylinder	F	DP 5075	1	3/8" x 31' 0" 10FJX Ends
			PMS-AM-2552	G	DP 5091	1	3/8" x 32' 0" 10FJX-8MP Ends
				Н	DP 5090	1	3/8" x 21'0" 10FJX-8MP Ends
	$\sim$		. Rea	1	DP 5088	1	1/4" x 22'0" 8MP Ends
	(5)(1)	•		J	DP 5060	1	1/4" x 2' 0" 6FJX Ends
	$\sim$ $\sim$						

3-3/4" x 12" Gauge Wheel Cylinder



NOTE: Tape all pipe thread fittings only. It is not necessary to tape the J.I.C. flare fittings.



CAUTION: Do not overtighten pipe threaded fittings. This may damage the cylinder.

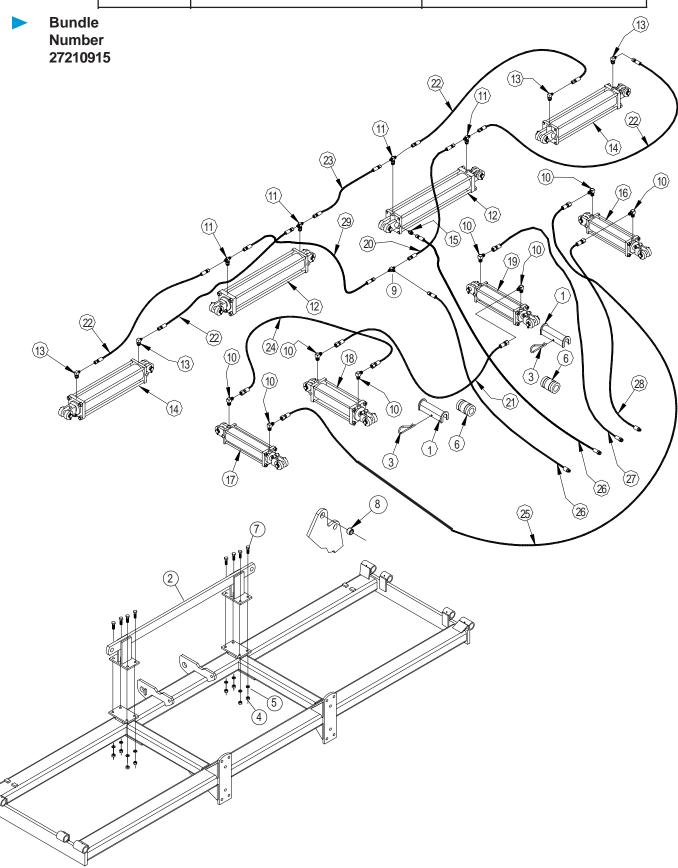
Ref. 1.	Part No. AM 3350	Req. 1	Description Bracket, cylinder lug, LR/LW STANDARDFOLD
2.	AM 3353	1	Frame, main, LR II, 13'6" center
3.	BP 3038	8	Nut, hex 5/8"-11
4.	BP 3039	8	Washer, lock 5/8"
5.	BP 3171	8	Hex cap screw, 5/8"-11 x 2"

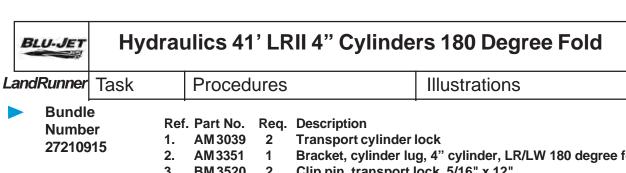


### Hydraulics 41' LRII 4" Cylinders 180 Degree Fold

**LandRunner** Task

Procedures



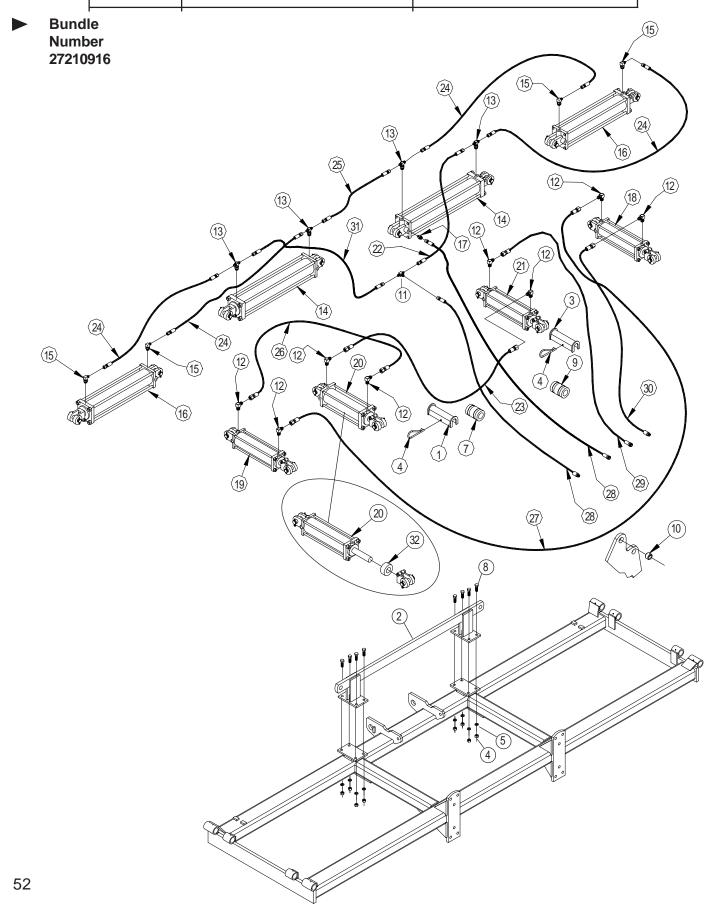


	1 1000	uics	iliustrations
D-1	David NI	<b>D</b>	Paradistra
	. Part No.	Req.	
1.	AM 3039	2	Transport cylinder lock
2.	AM 3351	1	Bracket, cylinder lug, 4" cylinder, LR/LW 180 degree fold
3.	BM 3520	2	Clip pin, transport lock, 5/16" x 12"
4.	BP3038	8	Nut, hex, 5/8"-11, grade 2, plated
5.	BP 3039	8	Washer, lock, 5/8", plated
6.	BP 3076	2	Depth collar set, 1-3/4", heavy duty
7.	BP3171	8	Hex cap screw, 5/8"-11 x 2", grade 5, plated
8.	BP 3570	2	Tension bushing, 1-1/2" x 1" x 1"
9.	DP 4004	1	Tee, 6MJ-6MJ
10.	DP 4143	8	Adapter, 10MIJ-8MSAE, 90 degree
11.		4	Tee, side, 6MJ-6MJ 8M, O-Ring
12.	DP 4248	2	Cylinder, hydraulic 4" x 24", 3000 psi, SAE W/Adapters
13.		4	Adapter, 6MJ-8MSAE, 90 degree
14.	DP 4375	2	Cylinder, hydraulic, 4" x 20", 3000 psi, SAE-34020
15.	DP 4394	1	Adapter, 8MSAE-6MJIC 6400-6-8
16.	DP 4483	1	Cylinder, rephase, 3-1/4" x 12", PMS-AM-2570
17.	DP 4484	1	Cylinder, rephase, 3-1/2" x 12", PMS-AM-2564
18.	DP 4485	1	Cylinder, rephase, 3-3/4" x 12", PMS-AM-2558
19.	DP 4486	1	Cylinder, rephase, 4" x 12", PMS-AM-2552
	DP 4086	10	Cable tie, 11-3/8", standard
	DP 4296	10	Cable tie, 33"
DDF	P1106	1	Hose kit, LRII deluxe fold,
20.	DP 5055	1	Hose, hydraulic, 1/4" x 66" (5'6"), 6FJX-6FJX
21.	DP 5062	1	Hose, hydraulic, 3/8" x 132" (11'), 10FJX-10FJX
22.	DP 5072	4	Hose, hydraulic, 1/4" x 120" (10'), 6FJX-6FJX
23.	DP 5073	1	Hose, hydraulic, 1/4" x 78" (6'6"), 6FJX-6FJX
24.	DP 5074	1	Hose, hydraulic, 3/8" x 162" (13'6"), 10FJX-10FJX
25.	DP 5075	1	Hose, hydraulic, 3/8" x 372" (31'), 10FJX-10FJX
26.	DP 5089	2	Hose, hydraulic, 1/4" x 264" (22'), 8MP-6FJX
27.	DP 5090	1	Hose, hydraulic, 3/8" x 252" (21'), 10FJX-8MP
28.	DP 5091	1	Hose, hydraulic, 3/8" x 384" (32') 10JX-8MP
29.	DP 5019	1	Hose, hydraulic, 1/4" x 90" (7'6"), 6FJX-6FJX
			, , , , , , , , , , , , , , , , , , , ,



## Hydraulics 41' LRII 4" Cylinders 180 Degree Fold

LandRunner Task Procedures Illustrations





## Hydraulics 41' LRII 4" Cylinders 180 Degree Fold

LandRunner Task

Procedures

Bundle
Number
27210916

Ref.	Part No.	Req.	Description
1.	AM 3039	1	Transport cylinder lock
2.	AM3351	1	Bracket, cylinder lug, 4" cylinder, LR/LW 180 degree fold
3.	AM 4721	1	Transport lock, heavy duty, 1-3/4" x 2" cylinder rod
4.	BM 3520	2	Clip pin, transport lock, 5/16" x 12"
5.	BP 3038	8	Nut, hex, 5/8"-11, grade 2, plated
6.	BP 3039	8	Washer, lock, 5/8" plated
7.	BP3076	1	Depth collar set, 1-3/4", heavy duty
8.	BP 3171	8	Hex cap screw, 5/8"-11 x 2", grade 5, plated
9.	BP3218	1	Depth collar set, 2", extra heavy duty
10.	BP 3570	2	Tension bushing, 1-1/2" x 1" x 1"
11.	DP 4004	1	Tee, 6MJ-6MJ-6MJ
12.	DP 4143	8	Adapter, 10MJIC-8MSAE, 90 degree
13.	DP 4181	4	Tee, side, 6MJ-6MJ-8M, O-Ring
14.	DP 4248	2	Cylinder, hydraulic 4" x 24", 3000 psi, SAE w/adapters
15.	DP 4301	4	Adapter, 6MJ-8MSAE, 90 degree, 6801-6-8
16.	DP 4375	2	Cylinder, hydraulic, 4" x 20", 3000 psi, SAE-34020
17.	DP 4394	1	Adapter, 8MSAE-6MJIC 6400-6-8
18.	DP 4484	1	Cylinder, rephase, 3-1/2" x 12", PMS-AM-2564
19.	DP 4485	1	Cylinder, rephase, 3-3/4" x 12", PMS-AM-2558
20.	DP 4486	1	Cylinder, rephase, 4" x 12", PMS-AM-2552
21.	DP 4487	1	Cylinder, rephase, 4-1/2" x 12" PMS-AM-2546
	DP 4086	10	Cable tie, 11-3/8", standard
	DP 4296	10	Cable tie, 33"
	1106	1	Hose kit, LRII deluxe fold, shoemaker '99
22.	DP 5055	1	Hose, hydraulic, 1/4" x 66" (5'6"), 6FJX-6FJX
23.	DP 5062	1	Hose, hydraulic, 3/8" x 132" (11'), 10FJX-10FJX
	DP 5072	4	Hose, hydraulic, 1/4" x 120" (10'), 6FJX-6FJX
	DP 5073	1	Hose, hydraulic, 1/4" x 78" (6'6"), 6FJX-6FJX
26.	DP 5074	1	Hose, hydraulic, 3/8" x 162" (13'6"), 10FJX-10FJX
27.	DP 5075	1	Hose, hydraulic, 3/8" x 372" (31'), 10FJX-10FJX
28.	DP 5089	2	Hose, hydraulic, 1/4" x 264" (22'), 8MP-6FJX
29.	DP 5090	1	Hose, hydraulic, 3/8" x 252" (21'), 10FJX-8MP
30.	DP 5091	1	Hose, hydraulic, 3/8" x 384" (32'), 10FJX-8MP
31.	DP 5019	1	Hose, hydraulic, 1/4" x 90" (7'6"), 6FJX-6FJX
32.	EM2697	1	1-1/2" ID x 3" OD aluminum x 1-5/16" hydraulic
			cylinder spacer

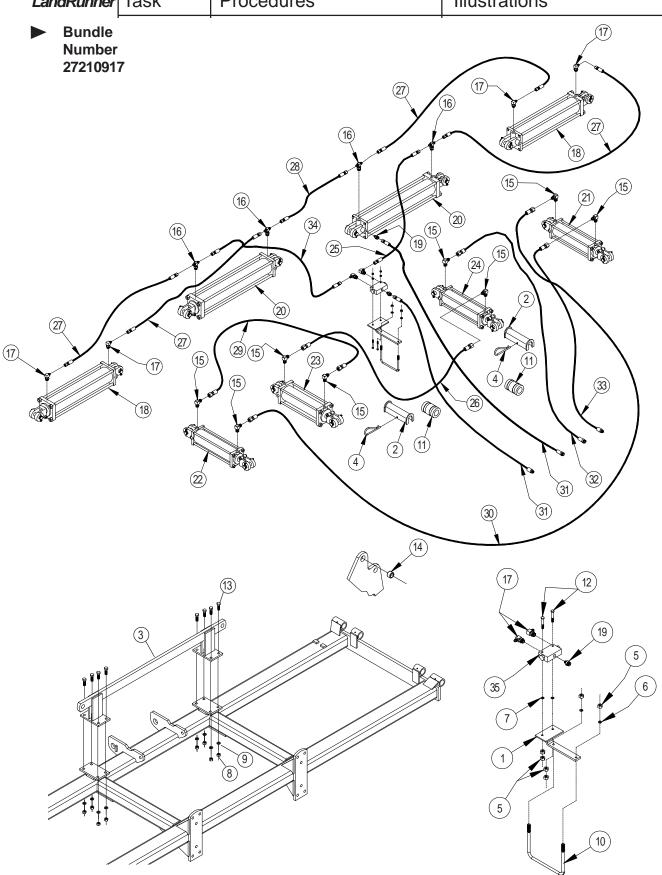


### Hydraulics 41' LRII 4-1/2" Cylinders 180 Degree Fold

LandRunner

Task

Procedures





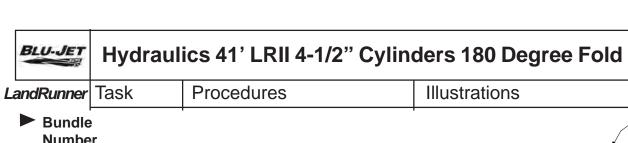
## Hydraulics 41' LRII 4-1/2" Cylinders 180 Degree Fold

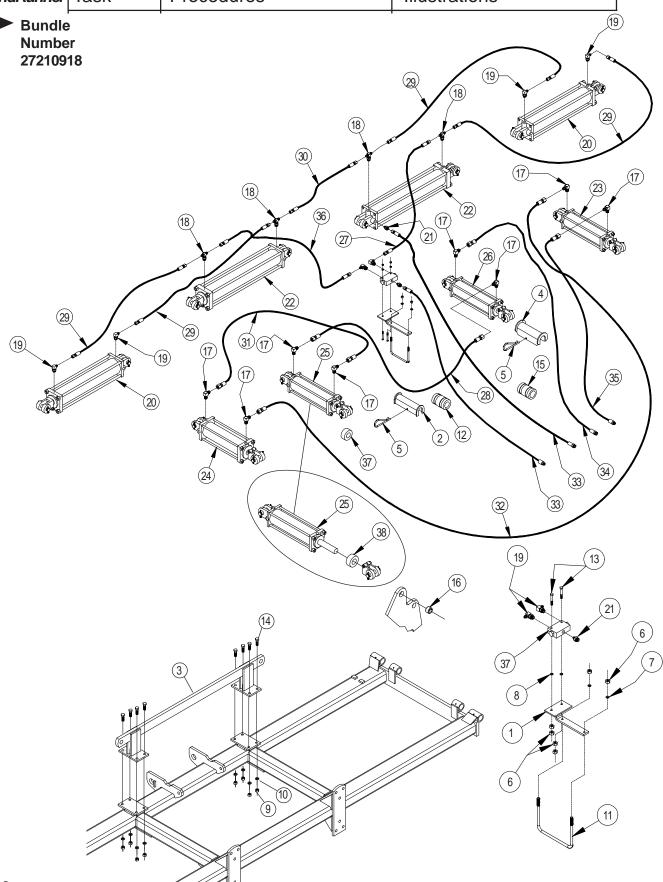
**LandRunner** Task

Procedures

Bundle
Number
27210917

Ref.	Part No.	Req.	Description
1.	AM 3029	1	Mounting bracket divider combiner
2.	AM 3039	2	Transport cylinder lock
3.	AM3352	1	Bracket, cylinder lug, 4-1/2" cylinder, LR/LW 180 degree fold
4.	BM 3520	2	Clip pin, transport lock 5/16" x 12"
5.	BP 3001	6	Nut, hex, 3/8"-16, grade 2, plated
6.	BP 3002	2	Washer, lock, 3/8", plated
7.	BP 3015	2	Washer, flat, 3/8", plated
8.	BP 3038	8	Nut, hex, 5/8"-11, grade 2, plated
9.	BP 3039	8	Washer, lock, 5/8", plated
10.	BP 3045	1	U-bolt, 3/8"-16 x 6" x 5", plated
11.	BP 3076	2	Depth collar set, 1-3/4" heavy duty
12.	BP 3096	2	Hex cap screw, 3/8"-16 x 2-1/2", grade 5, plated
13.	BP 3171	8	Hex cap screw, 5/8"-11 x 2", grade 5, plated
14.	BP 3560	2	Tension bushing, 1-1/2" x 1-1/4" x 1"
15.	DP 4143	8	Adapter, 10MJ-8MP, 90 degree male elbow
16.	DP 4181	4	Tee, side, 6MJ-6MJ 8M, O-Ring
17.	DP 4301	6	Adapter, 6MJ-8MSAE, 90 degree
18.	DP 4375	2	Cylinder, hydraulic, 4" x 20", 3000 psi, SAE-34020
19.	DP 4394	2	Adapter, 8MSAE-6MJIC 6400-6-8
20.	DP 4281	2	Cylinder, hydraulic 4-1/2" x 24", 3000 psi, SAE w/adapters
21.	DP 4483	1	Cylinder, rephase, 3-1/4" x 12", PMS-AM-2570
22.	DP 4484	1	Cylinder, rephase, 3-1/2" x 12", PMS-AM-2564
23.	DP 4485	1	Cylinder, rephase, 3-3/4" x 12", PMS-AM-2558
24.	DP 4486	1	Cylinder, rephase, 4" x 12", PMS-AM-2552
	DP 4086	10	Cable tie, 11-3/8", standard
	DP 4000 DP 4296	10	Cable tie, 33"
	DI 4230	10	Cable tie, 33
DDF	P1106	1	Hose kit, LRII deluxe fold, shoemaker '99
25.	DP 5055	1	Hose, hydraulic, 1/4" x 66" (5'6"), 6FJX-6FJX
26.	DP 5062	1	Hose, hydraulic, 3/8" x 132" (11'), 10FJX-10FJX
27.	DP 5072	4	Hose, hydraulic, 1/4" x 120" (10'), 6FJX-6FJX
28.	DP 5073	1	Hose, hydraulic, 1/4" x 78" (6'6"), 6FJX-6FJX
29.	DP 5074	1	Hose, hydraulic, 3/8" x 162" (13'6"), 10FJX-10FJX
30.	DP 5075	1	Hose, hydraulic, 3/8" x 372" (31'), 10FJX-10FJX
31.	DP 5089	2	Hose, hydraulic, 1/4" x 264" (22'), 8MP-6FJX
32.	DP 5090	1	Hose, hydraulic, 3/8" x 252" (21'), 10FJX-8MP
33.	DP 5091	1	Hose, hydraulic, 3/8" x 384" (32') 10JX-8MP
34.	DP 5019	1	Hose, hydraulic, 1/4" x 90" (7'6"), 6FJX-6FJX
35.	DP 5222	1	Flow divider combiner, shoemaker







### Hydraulics 41' LRII 4-1/2" Cylinders 180 Degree Fold

**LandRunner** Task

ask Procedures

33. DP 5089

34. DP 5090

35. DP 5091

36. DP 5019

37. DP 5222

38. EM 2697

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Illustrations

<b>&gt;</b>	Bundle
	Number
	27210918

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	Ref.	Par	t No.	Reg.	Description	
	1.	AM	3029	1	Mounting bracket divid	ler combiner
	2.	AM	3039	1	Transport cylinder lock	
	3.	AM:	3352	1	Bracket, cylinder lug, 4-1/2	2" cylinder, LR/LW 180 degree fold
	4.	AM.	4721	1	Transport lock, heavy di	uty, 1-3/4" x 2" cylinder rod
	5.	BM	3520	2	Clip pin, transport lock 5	5/16" x 12"
	6.	BP3	3001	6	Nut, hex, 3/8"-16, grade	2, plated
	7.	BP:	3002	2	Washer, lock, 3/8", plate	
	8.	BP3	3015	2	Washer, flat, 3/8", plated	d
	9.	BP3	3038	8	Nut, hex, 5/8"-11, grade	2, plated
	10.	BP:	3039	8	Washer, lock, 5/8" plate	d
	11.	BP:	3045	1	U-bolt, 3/8"-16 x 6" x 5",	plated
	12.	BP:	3076	1	Depth collar set, 1-3/4",	heavy duty
	13.	BP:	3096	2	Hex cap screw, 3/8"-16	x 2-1/2", grade 5, plated
	14.	BP:	3171	8	Hex cap screw, 5/8"-11	x 2", grade 5, plated
	15.	BP:	3218	1	Depth collar set, 2", extr	ra heavy duty
	16.	BP:	3560	2	Tension bushing, 1-1/2"	x 1-1/4" x 1"
	17.	DP 4	4016	8	Adapter, 10MJ-8MP, 90	degree male elbow
		DP 4	4181	4	Tee, side, 6MJ-6MJ-8M, 0	O-Ring
	19.	DP 4	4301	6	Adapter, 6MJ-8MSAE, 90	) degree
		DP 4	4375	2		20", 3000 psi, SAE-34020
		DP 4	1394	2	Adapter, 8MSAE-6MJIC 6	
		DP 4	1481	2		x 24", 3000 psi, SAE w/adapters
		DP 4	1484	1	Cylinder, rephase, 3-1/2'	
			1485	1	Cylinder, rephase, 3-3/4'	
			1486	1	Cylinder, rephase, 4" x 1	•
	26.	DP 4	1487	1	Cylinder, rephase, 4-1/2'	" x 12" PMS-AM-2546
			1000	40	0 11 4 44 0/01 4	
			1086	10	Cable tie, 11-3/8", standa	ard
		DP 4	1296	10	Cable tie, 33"	
	DDP	110	6	1	Hose kit, LRII deluxe fol	d shoemaker '99
			5055	2	Hose, hydraulic, 1/4" x 6	· ·
			5062	1	Hose, hydraulic, 3/8" x 1	
			5072	4	Hose, hydraulic, 1/4" x 1	
			5073	1	Hose, hydraulic, 1/4" x 7	
	31.		5074	1		62" (13'6"), 10FJX-10FJX
	32.		5075	1	Hose, hydraulic, 3/8" x 3	
	<b>J</b>	,		•	,, a. a. a,	- ( /,

Hose, hydraulic, 1/4" x 264" (22'), 8MP-6FJX

Hose, hydraulic, 3/8" x 252" (21'), 10FJX-8MP

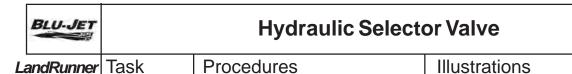
Hose, hydraulic, 3/8" x 384" (32'), 10FJX-8MP

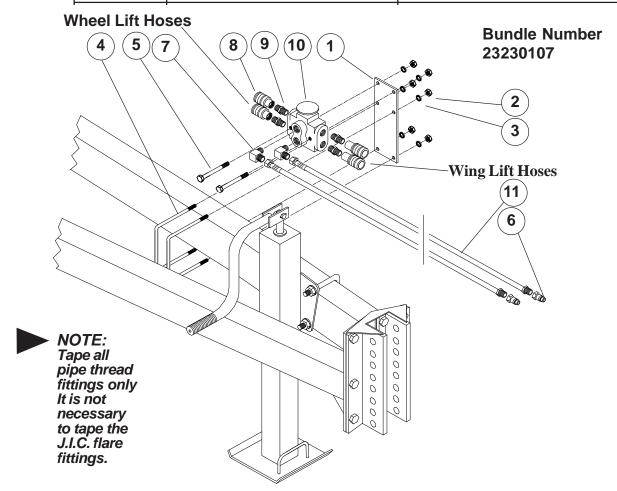
Hose, hydraulic, 1/4" x 90" (7'6"), 6FJX-6FJX

1-1/2" ID x 3" OD aluminum x 1-5/16" hydraulic

Flow divider combiner, shoemaker

cylinder spacer



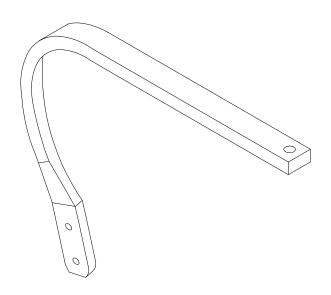


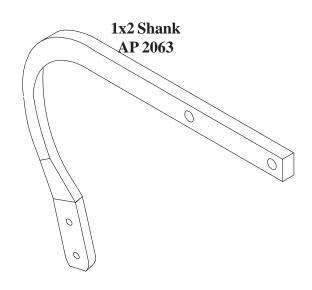


**NOTE:** Wire retainers are not included.

Ref.	Part No.	Req.	Description
1.	AM 3331	1	Bracket, universal
2.	BP 3001	6	Nut, hex, 3/8"-16, grade 2, plated
3.	BP3002	6	Washer, lock, 3/8", plated
4.	BP 3045	2	U-bolt, 3/8"-16 x 6" x 5", plated
5.	BP3116	2	Hex cap screw, 3/8"-16 x 3",
			grade 5, plated
6.	DP 4007	2	1/2" male tip quick coupler 8FP
7.	DP 4016	2	Adapter 10MJ-8MP 90 degree
			male elbow
8.	DP 4072	4	Quick coupler body,
			1/2" hydraulic
9.	DP 4094	4	Adapter 8MP-8MP
10.	DP 4132	1	Selector valve 6 outlet, 1/2" PT
11.	DP 5146	2	Hose, hydraulic, 3/8" x 96"(8'-0"),
			8MP-10FJX

	BLU-JET			Shanks	
Lá	andRunner	Task	Procedures		Illustrations





Edge Bent Shank AP 2125

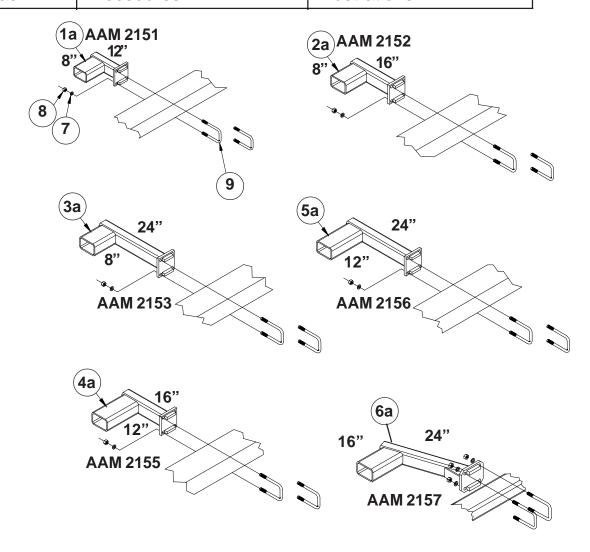


## **Offset Stagger Brackets**

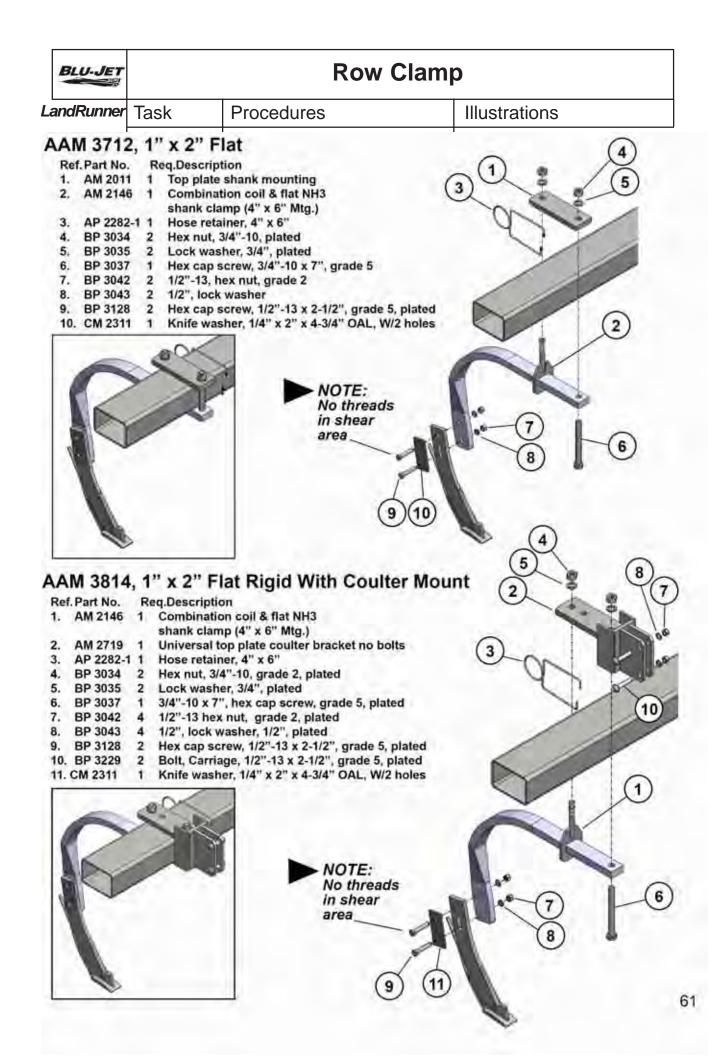
LandRunner

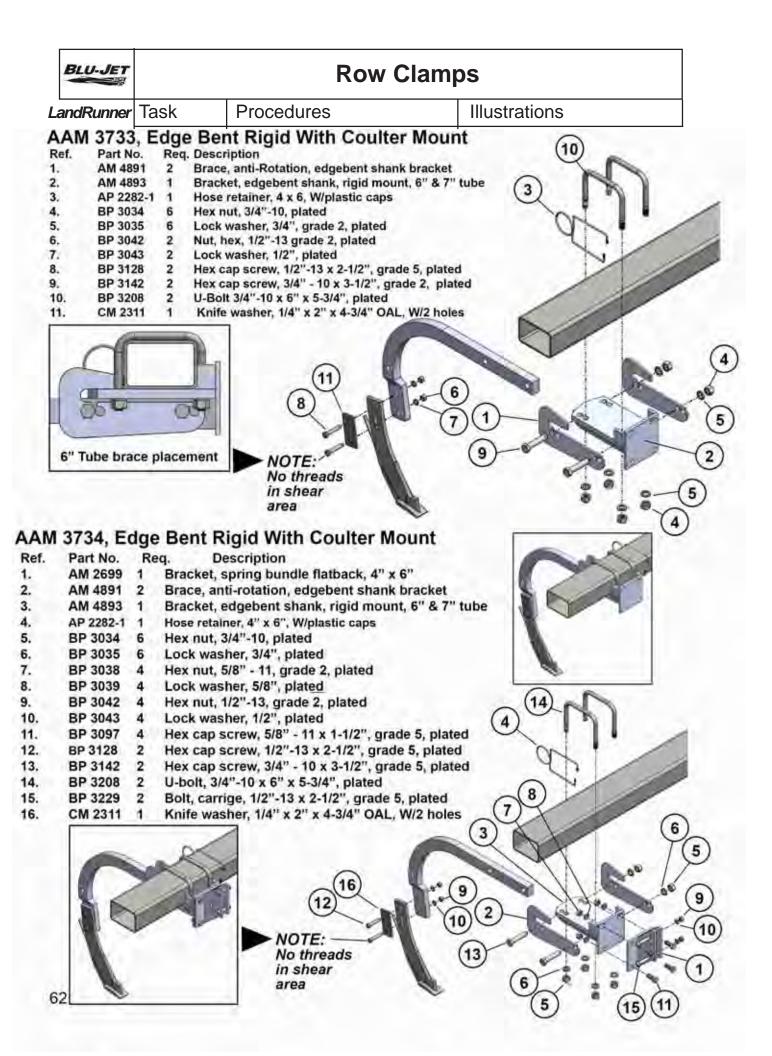
Task

Procedures



Ref.	Part No.	Req.	Description
1.	<b>AAM 2151</b>		Bracket, offset, 12" x 8" w/mounting hardware
1a.	AM 2393	1	Bracket, offset, 12" x 8", TMC Blue
2	<b>AAM 2152</b>		Bracket, offset, 16" x 8", w/mounting hardware
2a.	AM 2394	1	Bracket, offset, 16" x 8", TMC Blue
3.	<b>AAM 2153</b>		Bracket, offset, 24" X 8", w/mounting hardware
3a.	AM 2395	1	Bracket, offset, 24" x 8", TMC Blue
4.	<b>AAM 2155</b>		Bracket, offset, 16" x 12", w/mounting hardware
4a.	AM 2397	1	Bracket, offset , 16" x 12", TMC Blue
5.	<b>AAM 2156</b>		Bracket, offset, 24" x 12", w/mounting hardware
5a.	AM 2398	1	Bracket, offset, 24" x 12", TMC Blue
6.	<b>AAM 2157</b>	1	Bracket, offset, angled 24" x 16", w/mounting hardware
6a.	AM 3349	1	Bracket, offset, angled, 24" x 16" TMC Blue
7.	BP3034	4	Nut, hex, 3/4"-10, grade 2, plated
8.	BP 3035	4	Washer, lock, 3/4", plated
9.	BP3047	2	U-bolt, 3/4"-10 x 4" x 7-3/4", plated



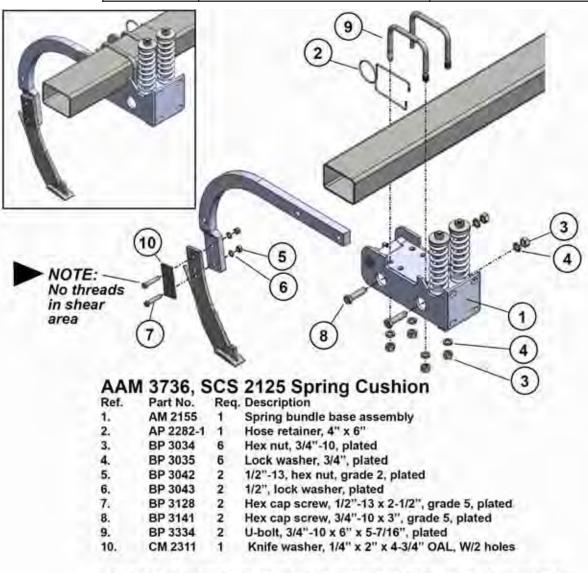


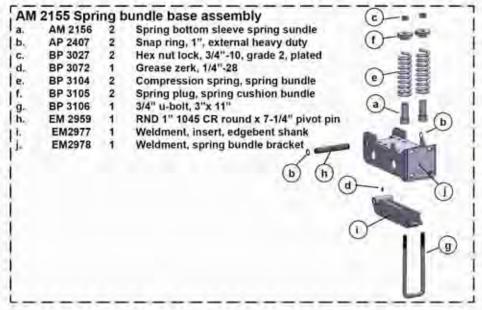
## BLU-JET

### **Row Clamps**

**LandRunner** Task

**Procedures** 





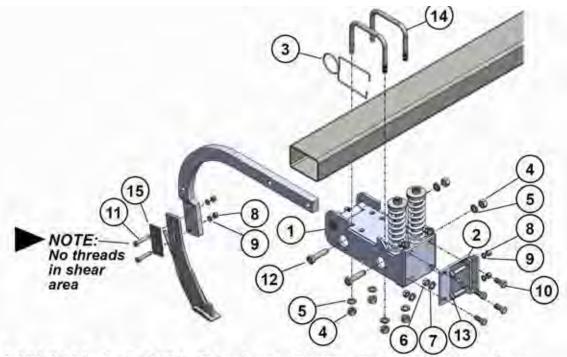


### **Row Clamps**

LandRunner

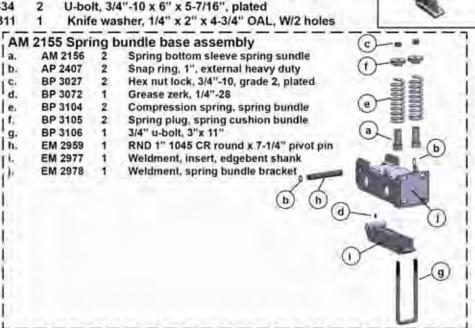
Task Procedures

Illustrations

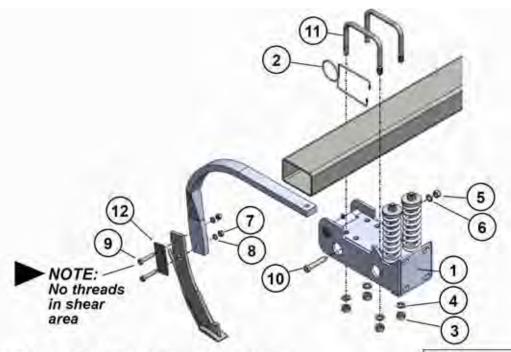


AAM 3735, SCS 2125, Edgebent, Spring Cushion W/Coulter

Ref.	Part No.	Req.	Description
1.	AM 2155	1	Spring bundle base assembly
2.	AM 2699	1	Bracket, spring bundle flatback, 4 x 6
3.	AP 2282-1	1	Hose retainer, 4" x 6"
4.	BP 3034	6	Hex nut, 3/4"-10, plated
5.	BP 3035	6	Lock washer, 3/4", plated
6.	BP 3038	4	Hex Nut, 5/8"-11, grade 2, plated
7.	BP 3039	4	Lock washer, 5/8"; plated
8.	BP 3042	4	Nut, hex, 1/2"-13, grade 2, plated
9.	BP 3043	4	Washer lock, 1/2", plated
10.	BP 3097	4	Hex cap screw, 5/8"-11 x 1-1/2", grade 5, plated
11.	BP 3128	2	Hex cap screw, 1/2"-13 x 2-1/2", grade 5, plated
12.	BP 3141	2	Hex cap screw, 3/4"-10 x 3", grade 5, plated
13.	BP 3229	2	Bolt, carriage, 1/2"-13 x 2-1/2", grade 5, plated
14.	BP 3334	2	U-bolt, 3/4"-10 x 6" x 5-7/16", plated
15.	CM 2311	1	Knife washer, 1/4" x 2" x 4-3/4" OAL, W/2 holes



	BLU-JET		Row Clamp	os
L	andRunner	Task	Procedures	Illustrations



#### AAM 3738, SCS 2100 Spring Cushion

AM 2156

AP 2407 BP 3027 BP 3034 BP 3035 BP 3072

BP 3104

**BP 3105** 

**BP 3106** 

BP 3140 EM 2959

EM 2978

EM 3074

Ref.	Part No.	Req.	Description
1.	AM 2189	1	Spring bundle base assembly
2.	AP 2282-1	1	Hose retainer, 4" x 6"
3.	BP 3034	4	Hex nut, 3/4"-10, plated
4.	BP 3035	4	Lock washer, 3/4", plated
5.	BP 3038	1	Nut, hex, 5/8"-11, grade 2
6.	BP 3039	1	Washer, lock, 5/8", plated
7.	BP 3042	2	1/2"-13, hex nut, grade 2, plated
8.	BP 3043	2	1/2", lock washer, plated
9.	BP 3128	2	Hex cap screw, 1/2"-13 x 2-1/2", grade 5, plated
10.	BP 3135	1	Hex cap screw, 5/8"-11 x 3-1/2", grade 5, plated
11.	BP 3334	2	U-bolt, 3/4"-10 x 6" x 5-7/16", plated
12.	CM 2311	1	Knife washer, 1/4" x 2" x 4-3/4" OAL, W/2 holes

AM 2189 Spring bundle base assembly

Spring bottom sleeve spring bundle

Snap ring, 1" external, heavy duty Hex nut lock, 3/4"-10, grade 2, plated Nut, hex, 3/4"-10, grade 2, plated Washer, lock, 3/4", plated

Compression spring, spring bundle

Spring plug, spring cushion bundle

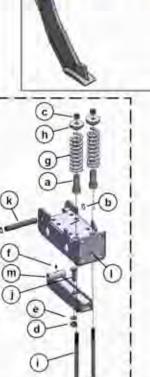
RND 1" 1045 CR round x 7-1/4" pivot pin Weldment, spring bundle bracket

Hex cap screw, 3/4"-10 x 2-1/2"

Weldment, Insert, 1" x 2" shank

Grease zerk, 1/4"-28

3/4" u-bolt, 3"x 11"



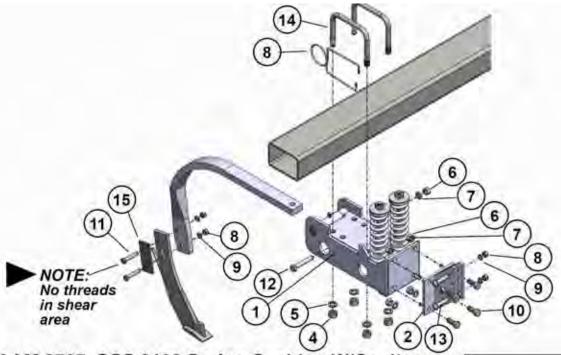


### **Row Clamps**

**LandRunner** Task

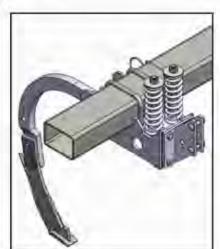
ask Procedures

Illustrations



AAM 3737, SCS 2100 Spring Cushion W/Coulter

Ref.	Part No.	Req	. Description
1.	AM 2189	1	Spring bundle base assembly
2.	AM 2699	1	Bracket, spring, bundle flatback, 4" x 6"
3.	AP 2282-1	1	Hose retainer, 4" x 6"
4.	BP 3034	4	Hex nut, 3/4-10, plated
5.	BP 3035	4	Lock washer, 3/4", plated
6.	BP 3038	5	Hex nut, 5/8-11, grade 2, plated
7.	BP 3039	5	Lock washer, 5/8", plated
8.	BP 3042	4	1/2"-13, hex nut, grade 2, plated
9.	BP 3043	4	Washer, lock, 1/2", plated
10.	BP 3097	4	Hex cap screw, 5/8"-11 x 1-1/2", grade 5, plated
11.	BP 3128	2	Hex cap screw, 1/2"-13 x 2-1/2", grade 5, plated
12.	BP 3135	1	Hex cap screw, 5/8"-11 x 3-1/2", grade 5, plated
13.	BP 3229	2	Bolt, carriage, 1/2"-13 x 2-1/2", grade5, plated
14.	BP 3334	2	U-bolt 3/4"-10 x 6" x 5-7/16" plated
15.	CM 2311	1	Knife washer, 1/4" x 2" x 4-3/4" OAL, W/2 holes

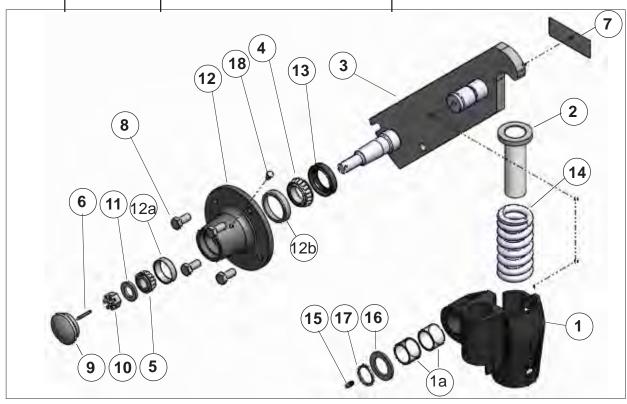


AM 2156	2	Spring bottom sleeve spring bundle	0-03
AP 2407	2	Snap ring, 1" external, heavy duty	
BP 3027	2	Hex nut lock, 3/4"-10, grade 2, plated	0.33
BP 3034	1	Nut, hex, 3/4"-10, grade 2, plated	(a) (a)
BP 3035	31	Washer, lock, 3/4", plated	(a)-1
BP 3072	1	Grease zerk, 1/4"-28	2
BP 3104	2	Compression spring, spring bundle (b)	( ) - A + (
BP 3105	2	Spring plug, spring cushion bundle	1
BP 3106	1	3/4" u-bolt, 3"x 11"	
BP 3140	1	Hex cap screw, 3/4"-10 x 2-1/2"	
EM 2959	1	RND 1" 1045 CR round x 7-1/4" pivot pin	
EM 2978	1	Weldment, spring bundle bracket (	m
s. EM 3074	1	Weldment, insert, 1" x 2" shank	

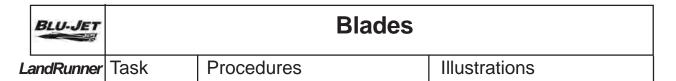


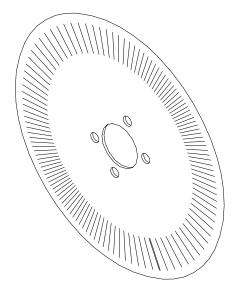
## **Super 1200 Flex Coulter and Shank Parts**

LandRunner Task Procedures Illustrations



	414 0700	0 16 115				
1	AM 2799	Coulter HD Super 1200	13.1	AP 2747	Grease seal,	
1. 1	AM 2743	Casting, coulter knee HD, machined	14.1	AP 2881	15235TB *Spring 2.472" OD x 5.875" OAL, .468"	21)
1a. 2	AP 2274	with bushings Bushing, 1-17/32"OD x 1-3/8" ID x 1" OAL	15.1 16.1	BP 3072 BP 3404	wire DIA. 1/4"-28 grease zerk 2-1/8" OD x 1-3/8" ID	(20)
2. 1	AM 2796	Spring cap & guide			x 10 GA. machinery	
3. 1	AM 2797	heavy duty coulter Coulter arm weldment HD		or as neede BP 3406		
4. 1	AP 2023	Bearing cone LM 67048	Toa.	BF 3400	Machinery Bushing, 2-1/8" OD x 1-3/8" ID x 14 GA	
5. 1	AP 2024	Bearing cone LM 11949	17.1	BP3405	Snap ring 1-3/8" External, 5160-137	(22)
6. 1	AP 2029	5/32" x 1-1/2"	18.1	BP 3552	1/4"-28 x 3/8"	
7. 1	AP 2216	cotter pin BLU-JET small decal 1-1/2" x 4"			Hex cap bolt grade 5	
8. 4	AP 2702	1/2"-20 x 1" hex	20.1	AM 2735	Coulter shank 16"	
9. 1 10.1	AP 2703 AP 2704	cap bolt Hub cap 1610 3/4"-16	21.1 22.1	BP 3162 BP 3205	3/8"x 2" roll pin Machine bushing	3
11.1	AP 2705	spindle nut 1-1/2" x 13/16" x .134" spindle	23.1	BP 3519	2-1/2"x 1-3/4" 10 ga. 3/8"x 2-1/2" roll pin	
12.1	AP 2706-	washer 1 Hub with cups, 4 Bolt 5" BC,	24.1	BP 3534	7/32"x 2-1/2" roll pin	23
	AP 2075 AP 2524	<b>3.62" pilot</b> Bearing Cup, LM 11910 Bearing Cup, LM 67010				24





Coulter Blade Fluted Blade 20" AP 2701

#### SealPro (Disc Sealer) Blade Options



AM 2479 17" Notched Blade



AM 2473 18" hoe wheel



AP 2728 17" wavy

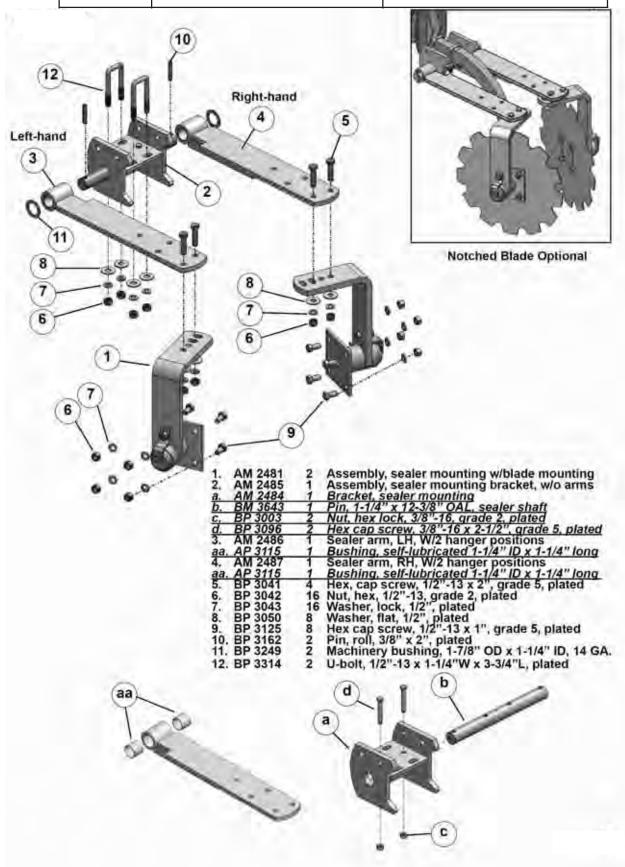
SealPro (AAM 2855) Disc Sealer BLU-JET 1 x 2 Shank Parts LandRunner **Procedures** Illustrations Task 10 Right-hand Left-hand Notched Blade Optional 7 9 AM 2481 Assembly, sealer mounting w/blade mounting AM 2485 Assembly, sealer mounting bracket, w/o arms AM 2484 Bracket, sealer mounting Pin, 1-1/4" x 12-3/8" OAL, sealer shaft
Nut, hex lock, 3/8"-16, grade 2, plated
Hex cap screw, 3/8"-16 x 2-1/2", grade 5, plated
Sealer arm, LH, W/2 hanger positions
Bushing, self-lubricated 1-1/4" ID x 1-1/4" long
Sealer arm, RH, W/2 hanger positions BM 3643 BP 3003 BP 3096 AM 2486 AP 3115 AM 2487 1 Sealer arm, RH, W/2 hanger positions
1 Bushing, self-lubricated 1-1/4" ID x 1-1/4" long
4 Hex, cap screw, 1/2"-13 x 2", grade 5, plated
16 Nut, hex, 1/2"-13, grade 2, plated
16 Washer, lock, 1/2", plated
8 Washer, flat, 1/2", plated
8 Hex cap screw, 1/2"-13 x 1", grade 5, plated
2 Pin, roll, 3/8" x 2", plated
2 Machinery bushing, 1-7/8" OD x 1-1/4" ID, 14 GA. AP 3115 **BP 3041 BP 3042 BP 3043 BP 3050** 9. BP 3125 10. BP 3162 11. BP 3249 12. BP 3313 U-bolt, 1/2"-13 x 2"W x 2-3/4"L, plated

69

BLU-JET

### SealPro (AAM 2856) Disc Sealer Edgebent Shank

LandRunner Task Procedures Illustrations



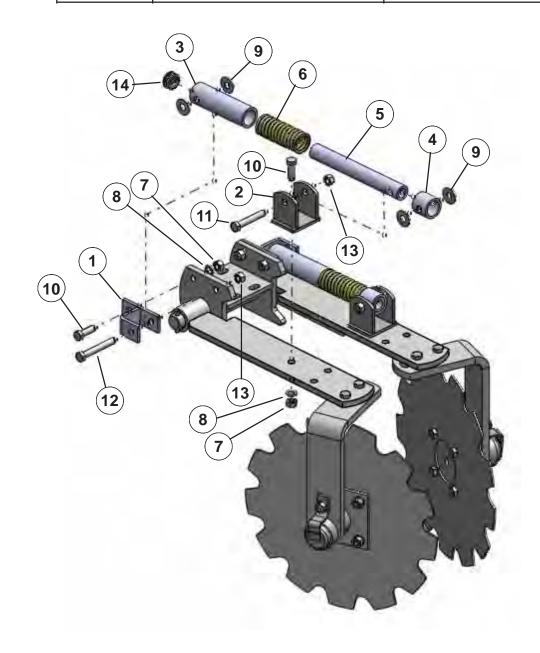


### SealPro II (AAM 2857) Assembly, Optional Sealer II Spring Add-on Kit 1 Row

**LandRunner** Task

ask Procedures

Illustrations



1.	AM 2488	2	Clevis, sealer spring, upper
2.	AM 2489	2	Clevis, sealer spring, lower

3. AM 2490 2 Tube, upper spring, plated

4. AM 2491 2 Bushing, spring collar, plated

5. AM 2492 2 Tube, spring guide, plated

6. AP 2997 2 Spring, 1.75 OD x 1.313 ID x 6.00 OAL

7. BP 3042 4 Nut, hex, 1/2"-13, grade 2, plated

8. BP 3043 4 Washer, lock, 1/2", plated

9. BP 3050 8 Washer, flat, 1/2", plated

10 BP 3126 4 Hex cap screw, 1/2"-13 x 1-1/2", grade 5, plated

11. BP 3129 2 Hex cap screw, 1/2"-13 x 3", grade 5, plated

12. BP 3130 2 Hex cap screw, 1/2"-13 x 3-1/2", grade 5, plated

13. BP 3244 4 Nut, hex lock, 1/2"-13, plated

14. AP 3116 2 Plug, Tube, 1-5/16"



### SealPro II (AAM 2857) Assembly, Optional Sealer II Spring Add-on Kit 1 Row

#### LandRunner

8

NOTE

(2) (AM 2489)

sealer spring

clevis must

be mounted

to the front

with the hole

#### Task

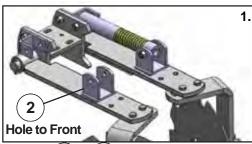
#### **Procedures**

#### Illustrations

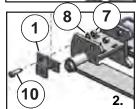
Mounting Spring

Add-on Kit

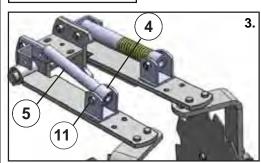
Mount (2) (AM 2489) sealer spring clevis lower to arm with clevis hole to the front. Install (10) (BP 3126) 1/2" x 1-1/2" grade 5 hex cap screw. Secure with (8) (BP 3043) 1/2" lock washer and (7) (BP 3042) 1/2" hex nut. 10



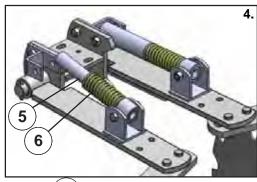
2. Mount (1) (AM 2488) upper sealer spring clevis to sealer mounting bracket with (10) (BP 3126) 1/2" x 1-1/2" grade 5 hex cap screw. Secure with (8) (BP 3043) 1/2" lock washer and (7) (BP 3042) 1/2" hex nut.



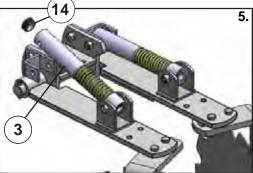
Insert (5) (AM 2492) spring guide tube into (4) (AM 2491) spring collar bushing and align the holes. Place in lower clevis. Insert (11) (BP 3129) 1/2" x 3" hex cap screw through clevis. Place (9) (BP 3050) 1/2" flat washers on both sides of bushing. Secure with (13) (BP 3244) 1/2" lock hex nut.



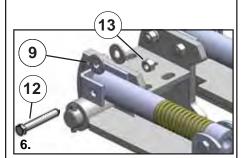
4. Place (6) (AP 2997) spring over (5) (AM 2492) spring guide tube.



5. Place (3) (AM 2490) upper spring tube over spring guide. Insert (14) (AP 3116) tube plug in end of upper spring tube.



Lower spring assembly into upper clevis and insert (12) (BP 3130) 1/2" x 3-1/2" hex cap screw. Place (9) (BP 3050) 1/2" flat washers on both sides of upper tube. Secure with (13) (BP 3244) 1/2" lock hex nut.



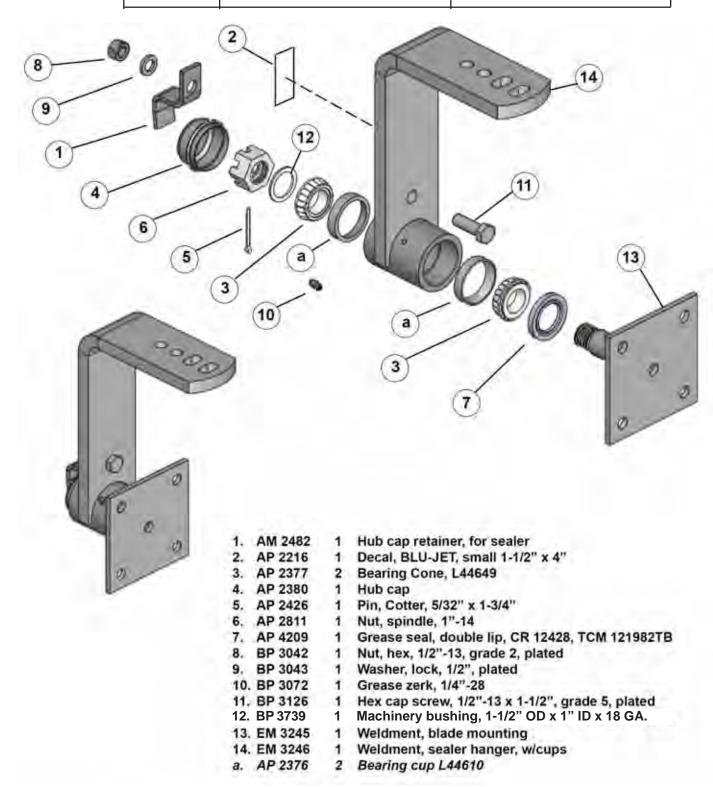
## SealPro II (AM 2481) Assembly, Sealer Hanger With Blade Mounting

LandRunner

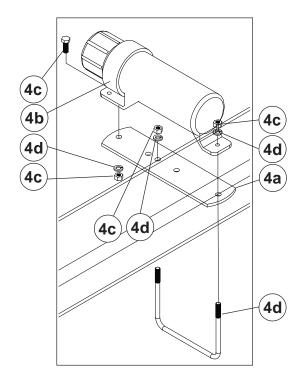
Task

**Procedures** 

Illustrations







4. AAM 2639 1 Manual Holder w/6" x 4
4a. AM 7640 1 Bracket, mounting, manual holder
4b. AP 4254 1 Manual holder, Black, 01-315
4c. BP 3001 3 Nut, hex, 3/8"-16, grade 2, plated
4d. BP 3002 3 Washer, lock, 3/8", plated,
4c. BP 3006 1 Hex cap screw, 3/8"-16 x 1", grade 5, plated
4d. BP 3045 1 U-bolt, 3/8"-16 x 6" x 5", plated



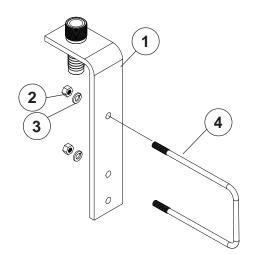


## Impellicone and Mounting Hardware

**LandRunner** Task

**Procedures** 

Illustrations



AAM 2632 Impellacone 13 port W/Mount & Hardware, 4 x 6

Ref. Part No. Req. Description

Bracket, Impellicone Mounting
Nut, hex, 3/8"-16, grade 2, plated
Washer, lock, 3/8", plated
U-bolt, 3/8"-16 x 4-1/16" x 7", plated AM 7639 2. BP 3001 2

**BP3002** 3. 2

4. **BP3214** 1 CP 2564 Manifold, 13 port, Impellicone

AAM 2633 Impellacone 18 port W/Mount & Hardware, 4 x 6

Ref. Part No. Req. Description

AM7639 **Bracket, Impellicone Mounting** Nut, hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", plated U-bolt, 3/8"-16 x 4-1/16" x 7", plated Manifold, 18 port, Impellicone 2 BP3001 2.

3. BP3002 4. **BP3214** 

**CP 2565** 





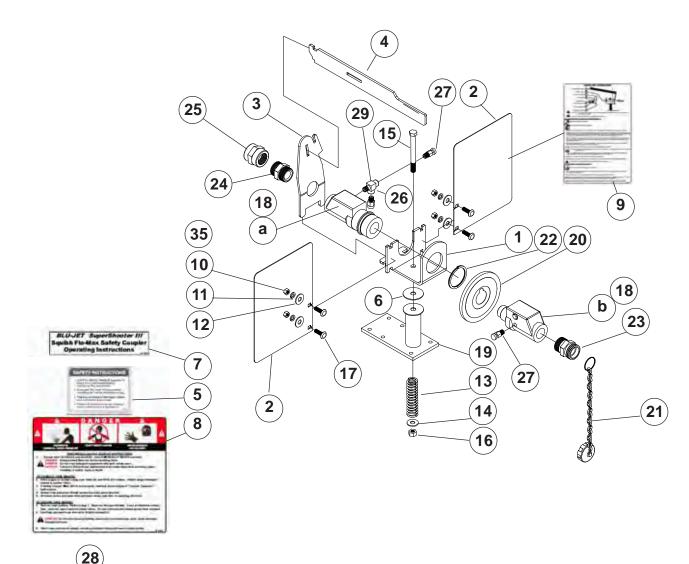


## **SuperShooter III Parts AAM 3514**

Illustrations

LandRunner

Task Procedures



Cable tie 11-3/4"
Standard

	BLU-JET	SuperShooter III Parts					
Lá	andRunner	Task	Procedures	Illustrations			

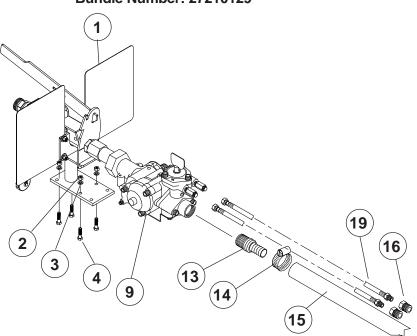
AAI	M 3514	1	Super Shooter III Squibb Coupler/BodyGuard III
1.	AM 7634	1	Valve mounting, SuperShooter III
2.	AM 7635	2	Decal plate, 9" x 12", SuperShooter III
3.	AM 7660	1	Coupler release plate, SuperShooter III
4.	AM 7661	1	Coupler release handle, SuperShooter III
5.	<b>AP 2227</b>	1	Decal, Safety Instruction, NH3, 4" x 3"
6.	AP 2418	1	Spring retainer washer
7.	AP 2972	1	Decal, BLU-JET SuperShooter III
8.	AP 2973	1	Decal, SuperShooter III Hookup instructions
9.	AP 2974	1	Decal, SuperShooter III, Squibb coupler operation\
10.	BP 3001	4	Nut, hex, 3/8"-16, grade 2, plated
11.	BP 3002	4	Washer, lock, 3/8", plated
12.	BP 3015	4	Washer, flat, 3/8", plated
13.	BP 3084	1	Compression spring SuperShooter
14.	BP 3087	1	Washer, flat, 7/16", plated
15.	BP 3132	1	Hex cap screw, 1/2"-13 x 5", grade 5, plated
16.	BP 3244	1	Nut, hex lock, 1/2"-13, plated
17.	BP 3701	4	Bolt, carriage, 3/8"-16 x 1", grade 5, plated
18.	CCP 2403	1	Quick coupler set, Squibb-Taylor FM125
	a. CP 2405	1	Quick coupler, Squibb, Female half, FM125-1101
	b. CP 2406	1	Quick coupler, Squibb, Male half, FM125-1200
19.	CM 2225	1	SuperShooter pedestal
20.	CM 2249	1	Body Guard, SuperShooter III
	CP 2401	1	Dust cap w/chain ACME adapter 22-63FC
22.	CP 2416	1	Snap ring, 1-1/4" quick coupler
23.	CP 2423	1	ACME adapter 1-1/4" MPT x 1-3/4" AM
	CP 2522	1	Nipple, hex, 1-1/4" NPT, 3000 PSI-cadmium plated
25.	CP 2566	1	Coupler, 1-1/4" hex pipe steel, plated
	CP 2837	1	Valve, pressure relief, 350 psi, A-3184
	CP 2838	1	Valve, bleeder, 104851-01
28.	DP 4081	1	Tee, 4MP-4FP-4FP



## Meter Assembly 9500 Single Standard Distribution

Task **Procedures** Illustrations LandRunner

Bundle Number: 27210129



Ref. Part No. Req. Description

AAM 2632 Impellacone 13 port W/Mount & Hardware, 4 x 6

Ref. Part No. Req. Description

**Bracket, Impellicone Mounting** AM 7639 a. Nut, hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", platedd U-bolt, 3/8"-16 x 4-1/16" x 7", plated **BP3001** 2 b.

**BP3002** 2 C. 1

BP3214 d. **CP 2564** Manifold, 13 port, Impellicone 1

SuperShooter III/Squibb coupler/BodyGuard III AAM 3514 1

**BP3001** Nut, Hex, 3/8"-16, grade 2, plated 2. 6

**BP3002** 3. 6

Washer, lock, 3/8", plated Hex cap screw, 3/8"-16 x 1-1/2", grade 5, plated **BP3005** 4.

5. **BP3045** 1

U-bolt, 3/8"-16 x 6" x 5", plated Hose, EVA, 3/8" 23 ft (CP 2504 scored @ 23 ft) 6. **CCP 2561** 

Hose, EVA, 3/8" 235 ft (CP 2504 scored @ 23 ft) 7. **CCP 2564** 13

8. CM 2221 NH3 gauge holder, tongue mount 1

**CP2012** Meter Matic B9500 w/hydraulic shutoff 9. 1

10. **CP2100** Gauge NH3 0-60# 1

**CP2305** 30 Hose clamp wire 3/8" hose 11.

**CP2308** Hose barb 1/4" x 3/8" hose A1132 12. 15

Hose barb 1" Black pipe 13. **CP2310** 1

**CP2314** Hose clamp, worm gear, 1/2"-1 tubing, SS 14. 2

**CP2521A** Hose, EVA, 1" reinforced x 38 (3'2") w/tie & tag 15. 1

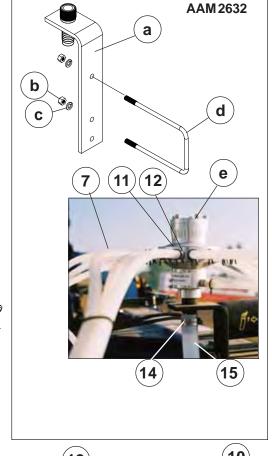
16. **DP 4006** 2 Adapter, 8MP-4FP, 5406-8-4

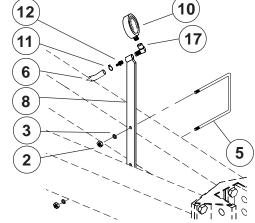
17. **DP 4012** 1 Elbow, street, 4MP-4FP 90 degree

26 Cable tie 11-3/8" standard 18. **DP 4086** 

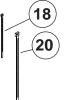
Hose, hydraulic, 1/4" x 264 (22' 0") 19. **DP 4096** 2

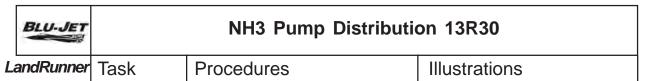
13 **DP 4296** Cable tie 33" 20.



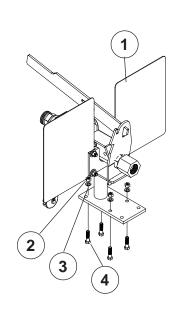


NOTE: 3/8 EVA Hose Comes Partially Pre-cut to Length, Length Of Hose is Determined By Width Of Tool Bar. Number Of Pre-cut Sections Are Determined By Number Of Row Spacings.





Bundle Number: 27200030



Ref. Part No. Req. Description

AAM 2632 Impellacone 13 port W/Mount & Hardware, 4 x 6

Ref. Part No. Req. Description

AM 7639 Bracket, Impellicone Mounting 1 Nut, hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", platedd U-bolt, 3/8"-16 x 4-1/16" x 7", plated BP 3001 2 b. 2 BP 3002 C.

d. **BP3214** 1 **CP 2564** Manifold, 13 port, Impellicone

1 AAM3514 1 SuperShooter III/Squibb coupler/BodyGuard III

2. **BP3001** 6

3. **BP3002** 6

Nut, Hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", plated Hex cap screw, 3/8"-16 x 1-1/2", grade 5, plated 4. **BP3005** 4 5.

**BP3045** 1

U-bolt, 3/8"-16 x 6" x 5", plated Hose, EVA, 3/8" 23 ft (CP 2504 scored @ 23 ft) Hose, EVA, 3/8" 235 ft (CP 2504 scored @ 23 ft) 6. **CCP 2561** 1 7. CCP 2564 13

NH3 gauge holder, tongue mount 8. CM 2221 1

Gauge NH3 0-60# 9. **CP 2100** 1

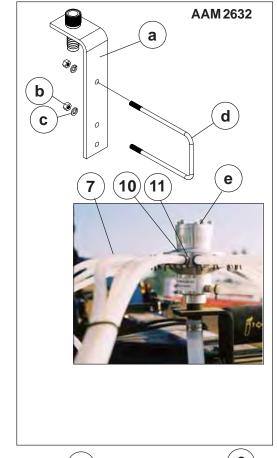
10. **CP 2305** 30 Hose clamp wire 3/8" hose

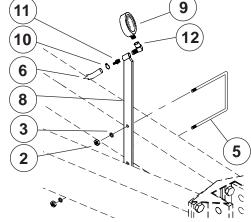
Hose barb 1/4" x 3/8" hose A1132 11. **CP2308** 15

12. DP 4012 1 Elbow, street, 4MP-4FP 90 degree

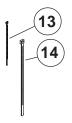
13. DP 4086 26 Cable tie 11-3/8" standard

14. DP 4296 13 Cable tie 33"





NOTE: 3/8 EVA Hose Comes Partially Pre-cut to Length, Length Of Hose is Determined By Width Of Tool Bar. Number Of Pre-cut Sections Are Determined By Number Of Row Spacings.





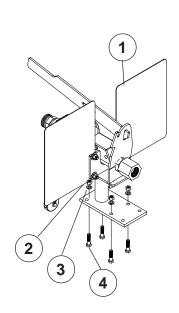
## NH3 Pump Distribution 15R30

LandRunner

**Procedures** Task

Illustrations

Bundle Number: 20200031



Ref. Part No. Req. Description

AAM 2633 Impellacone 18 port W/Mount & Hardware, 4 x 6

Ref. Part No. Req. Description

**Bracket, Impellicone Mounting AM7639** a. Nut, hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", platedd U-bolt, 3/8"-16 x 4-1/16" x 7", plated BP 3001 2 b.

2 C. **BP3002** 

d. **BP3214** 1

**CP 2565** Manifold, 18 port, Impellicone 1

SuperShooter III/Squibb coupler/BodyGuard III 1 AAM 3514 1

2. BP 3001 6

3. **BP3002** 6

Nut, Hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", plated Hex cap screw, 3/8"-16 x 1-1/2", grade 5, plated **BP3005** 4 4.

5. **BP3045** 1

U-bolt, 3/8"-16 x 6" x 5", plated Hose, EVA, 3/8" 15 ft (CP 2504 scored @ 15 ft) 6. CCP 2561 1

7. **CCP 2565** 15 Hose, EVA, 3/8" 25 ft (CP 2504 scored @ 25 ft)

8. CM 2221 1 NH3 gauge holder, tongue mount

Gauge NH3 0-60# 9. **CP2100** 1

10. CP 2305 Hose clamp wire 3/8" hose 32

Hose barb 1/4" x 3/8" hose A1132 **CP 2308** 17 11.

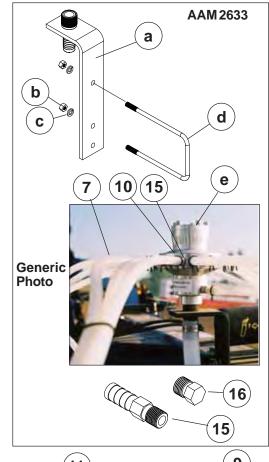
DP 4012 Elbow, street, 4MP-4FP 90 degree 12. 1

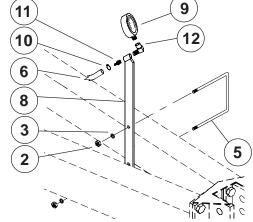
Cable tie 11-3/8" standard 13. **DP 4086** 30

Cable tie 33" 14. DP 4296 15

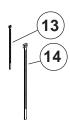
Hose barb 1/8" MP x 3/8" hose A6132 **15. CP 2300** 16

Plug, 1/8" pipe, A61135 16. CP 2303 2











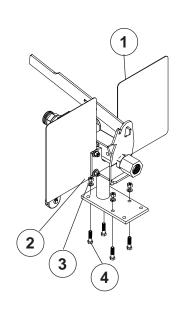
## NH3 Pump Distribution 17R30

**LandRunner** Task

**Procedures** 

Illustrations

Bundle Number: 20200032



Ref. Part No. Req. Description

AAM 2633 Impellacone 18 port W/Mount & Hardware, 4 x 6

Ref. Part No. Req. Description

**Bracket, Impellicone Mounting** AM 7639 Nut, hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", platedd U-bolt, 3/8"-16 x 4-1/16" x 7", plated **BP3001** 2 b.

**BP3002** 2 C.

**BP3214** 1 d.

Manifold, 18 port, Impellicone **CP 2565** 1 e.

SuperShooter III/Squibb coupler/BodyGuard III AAM 3514 1

2. **BP3001** 

3. **BP3002** 

Nut, Hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", plated Hex cap screw, 3/8"-16 x 1-1/2", grade 5, plated 4. **BP3005** 

5. **BP3045** 

U-bolt, 3/8"-16 x 6" x 5", plated Hose, EVA, 3/8" 15 ft (CP 2504 scored @ 15 ft) 6. **CCP 2561** Hose, EVA, 3/8" 27 ft (CP 2504 scored @ 27 ft) 7. **CCP 2566** 17

8. CM 2221 NH3 gauge holder, tongue mount

9. **CP2100** Gauge NH3 0-60#

**CP 2305** Hose clamp wire 3/8" hose 10. 36

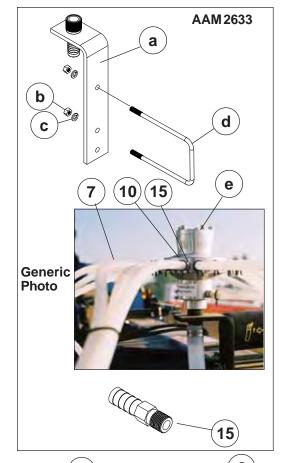
**CP 2308** Hose barb 1/4" x 3/8" hose A1132 11. 119

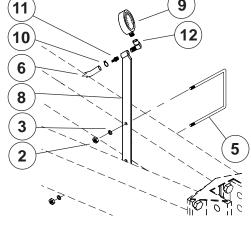
**DP 4012** Elbow, street, 4MP-4FP 90 degree 12.

**DP 4086** Cable tie 11-3/8" standard 13. 34

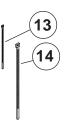
14. **DP 4296 17** Cable tie 33"

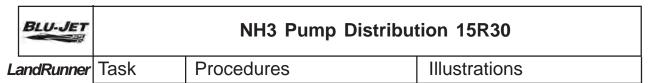
**CP 2300** Hose barb 1/8" MP x 3/8" hose A6132 15.



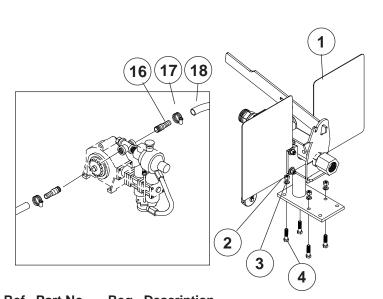


NOTE: 3/8 EVA Hose Comes Partially Pre-cut to Length, Length Of Hose is Determined By Width Of Tool Bar. Number Of Pre-cut Sections Are Determined By Number Of Row Spacings.





Bundle Number: 20200075



Ref. Part No. Req. Description AAM 2632 Impellacone 13 port W/Mount & Hardware, 4 x 6 (Qty. 2) Ref. Part No. Req. Description

Bracket, Impellicone Mounting **AM7639** a. Nut, hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", platedd **BP3001** b. 2 2 C. **BP3002** U-bolt, 3/8"-16 x 4-1/16" x 7", plated d. **BP3214** 1

**CP 2564** Manifold, 13 port, Impellicone

1 AAM3514 1 SuperShooter III/Squibb coupler/BodyGuard III 2.

**BP3001** 8 3. **BP3002** 8

Nut, Hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", plated Hex cap screw, 3/8"-16 x 1-1/2", grade 5, plated 4. **BP3005** 4

5. 2 **BP3045** 

U-bolt, 3/8"-16 x 6" x 5", plated Hose, EVA, 3/8" 18 ft (CP 2504 scored @ 18 ft) 6. 15 CCP 2562

Hose, EVA, 3/8" 23 ft (CP 2504 scored @ 23 ft) 7. CCP 2564 2

8. 2 NH3 gauge holder, tongue mount CM 2221 2 Gauge NH3 0-60# 9. **CP 2100** 

Hose clamp wire 3/8" hose 10. **CP 2305** 34

11. **CP 2308** 19 Hose barb 1/4" x 3/8" hose A1132 Elbow, street, 4MP-4FP 90 degree 12. **DP 4012** 2

Cable tie 11-3/8" standard 13. **DP 4086** 15

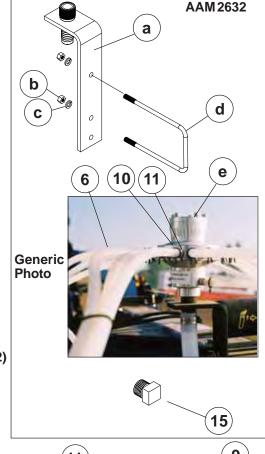
DP 4296 Cable tie 33" 14. 8

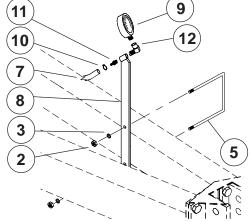
Plug, 1/4" pipe, square head 15. CP 2304 11

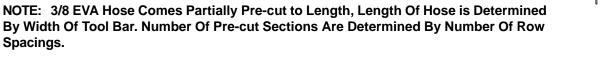
CP 2310 2 Hose barb 1" Black pipe 16.

Hose clamp, worm gear, 1/2"-1" tubing, SS 2 17. **CP2314** 

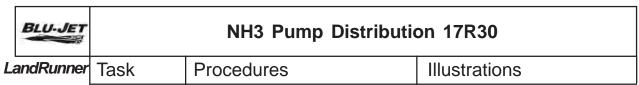
Hose, EVA, 1" reinforced x 144 (12') w/tie & tag 18. CP 3000 1



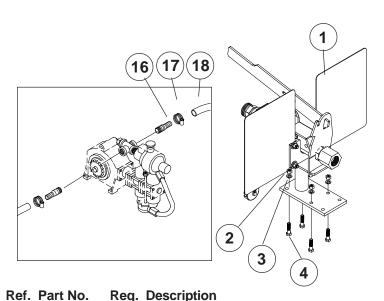




Spacings.



Bundle Number: 20200076



Req. Description AAM 2632 Impellacone 13 port W/Mount & Hardware, 4 x 6 (Qty. 2)

Req. Description Ref. Part No.

**Bracket, Impellicone Mounting** AM 7639 Nut, hex, 3/8"-16, grade 2, plated Washer, lock, 3/8", platedd U-bolt, 3/8"-16 x 4-1/16" x 7", plated BP 3001 b. 2

**BP3002** 2 C.

d. **BP3214** 1

**CP 2564** Manifold, 13 port, Impellicone e.

AAM 3514 SuperShooter III/Squibb coupler/BodyGuard III 1 1

**BP3001** Nut, Hex, 3/8"-16, grade 2, plated 2.

3. **BP3002** 8

Washer, lock, 3/8", plated Hex cap screw, 3/8"-16 x 1-1/2", grade 5, plated 4. **BP3005** 

5. **BP3045** 

U-bolt, 3/8"-16 x 6" x 5", plated Hose, EVA, 3/8" 18 ft (CP 2504 scored @ 18 ft) 6. CCP 2562 17 Hose, EVA, 3/8" 23 ft (CP 2504 scored @ 23 ft) 7. CCP 2564

CM 2221 NH3 gauge holder, tongue mount

Gauge NH3 0-60# **CP 2100** 

Hose clamp wire 3/8" hose 38 10. CP 2305

Hose barb 1/4" x 3/8" hose A1132 **CP 2308** 21

Elbow, street, 4MP-4FP 90 degree 12. DP 4012

Cable tie 11-3/8" standard 13. DP 4086 17

Cable tie 33" 14. DP 4296 9

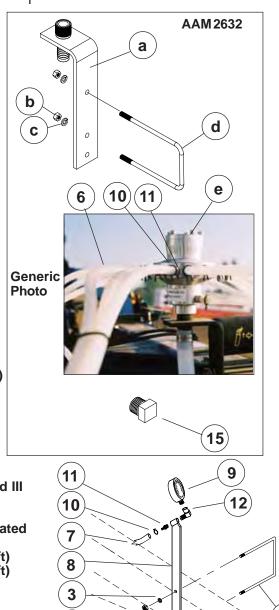
15. CP 2304 9 Plug, 1/4" pipe, square head

Hose barb 1" Black pipe 16. CP 2310 2

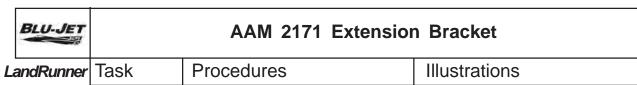
Hose clamp, worm gear, 1/2"-1" tubing, SS 17. CP 2314 19.18. **CP3000** Hose, EVA, 1" reinforced x 144

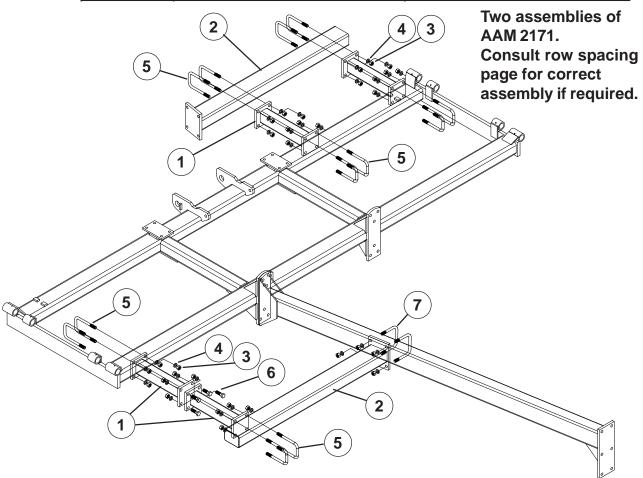
(12') w/tie & tag

NOTE: 3/8 EVA Hose Comes Partially Pre-cut to Length, Length Of Hose is Determined By Width Of Tool Bar. Number Of Pre-cut Sections Are Determined By Number Of Row Spacings.



2



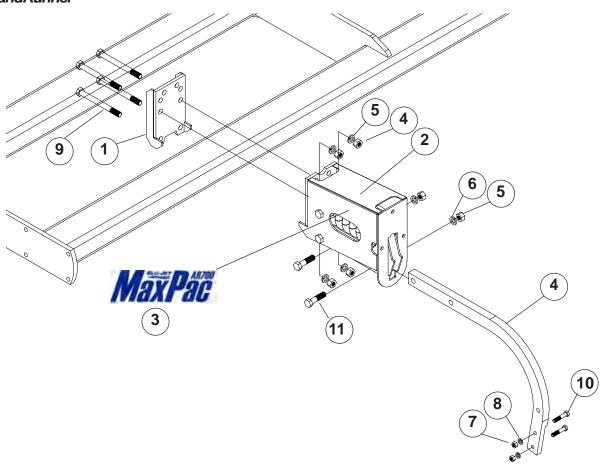


Ref.	Part No.	Req.	Description
1.	AM 3400	2	Bracket, Extension, 20" Double Mtg.
2.	AM 3401	1	Bracket, Extension, Angled End Mtg, 61"
3.	BP 3034	16	Nut, Hex, 3/4"-10, Grade 2, Plated
4.	BP 3035	16	Washer, Lock, 3/4", Plated
5.	BP 3047	8	U-bolt, 3/4"-10 x 4"W x 7-3/4"L, Plated
6.	BP 3140	4	Hex Cap Screw, 3/4"-10 x 2-1/2", Grade 5, Plated
7.	BP 3352	2	U-bolt, 3/4"-10 x 6"W x 5-3/4"L, Plated



## MaxPac AR700 Row Unit

## LandRunner



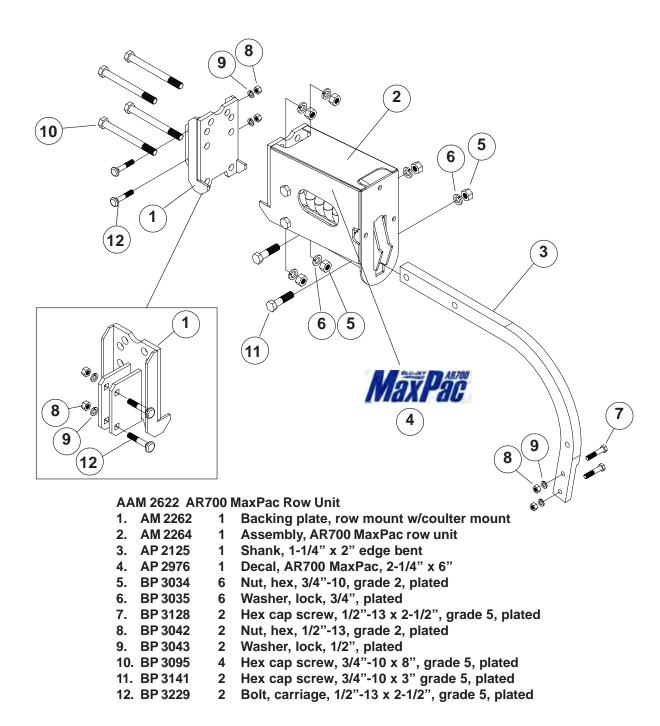
#### AAM 2621 AR700 MaxPac Row Unit

- 1. AM 2261 Backing plate, row unit AR 700 MaxPac row unit
- 2. AM 2264 Assembly, AR700 MaxPac row unit
- 3. AP 2976 Decal, AR700 MaxPac, 2-1/4" x 6"
- Shank, 1-1/4" x 2" edge bent 4. AP 2125
- Nut, hex, 3/4"-10, grade 2, plated 5. BP 3034
- 6. BP 3035 6 Washer, lock, 3/4", plated
- 2 Nut, hex, 1/2"-13, grade 2, plated 7. BP 3042
- 8. BP 3043
- Washer, lock, 1/2", plated
  Hex cap screw, 3/4"-10 x 8", grade 5, plated 9. BP 3095
- 2 Hex cap screw, 1/2"-13 x 2-1/2", grade 5, plated 10. BP 3128
- 11. BP 3141 2 Hex cap screw, 3/4"-10 x 3" grade 5, plated



## MaxPac AR700 6" Tube

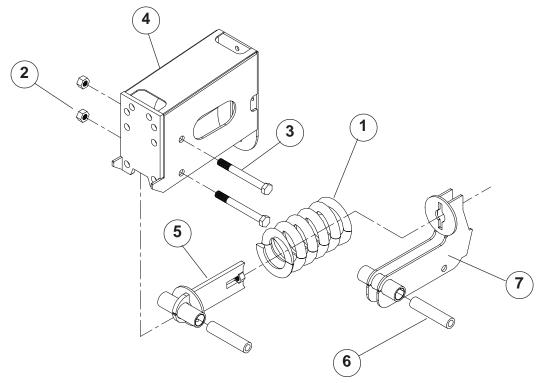
#### LandRunner





## MaxPac AR700

## LandRunner



## AAM 2264 Assembly, AR700 MaxPac

- 1. AP 2970 1 Spring, 5.5 OD x 3.375 ID x 9.062 OAL, 1.062
- 2. BP 3027 2 Nut, hex lock, 3/4"-10, grade 2, plated
- 3. BP 3037 2 Hex cap screw, 3/4"-10 x 7", grade 5, plated
- 4. EM 4619 1 Weldment, row mount, SCS 2004
- 5. EM 4626 1 Weldment, spring retainer, SCS 2004
- 6. EM 4627 2 1-1/4" OD x 0.771 ID DOM x 5-5/8", spacer bushing
- 7. EM 4633 1 Weldment, shank holder, SCS 2004

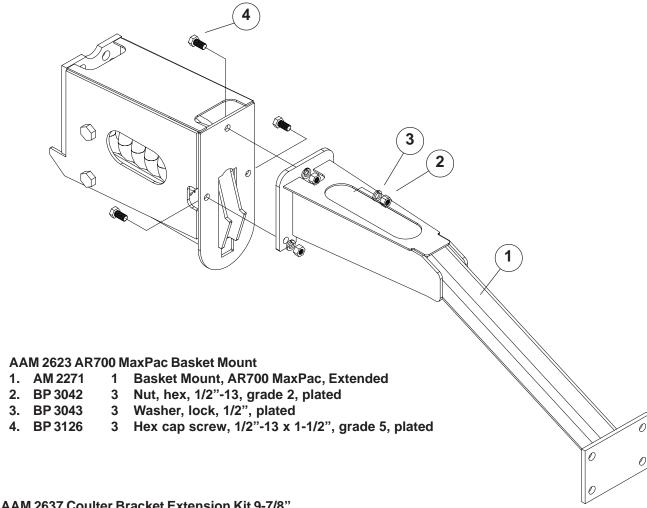


## **Basket Mount Arm & Coulter Extension**

LandRunner

**Procedures** Task

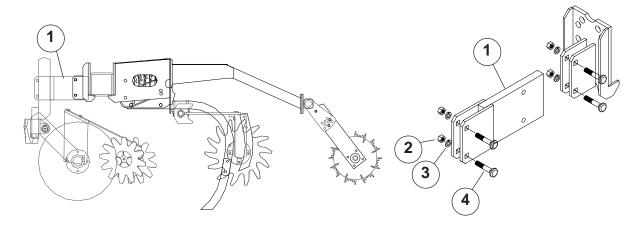
Illustrations



#### AAM 2637 Coulter Bracket Extension Kit 9-7/8"

(Use when residue managers are mounted on coulters.)

- 1. AM 2622 1 Bracket, coulter shank extension, (9-7/8")
- 2. BP 3042 2 Nut, hex, 1/2"-13, grade 2, plated
- 3. BP 3043 2 Washer, lock, 1/2", plated
- 4. BP 3229 2 Bolt, carriage, 1/2"-13 x 2"-1/2", grade 5, plated



BLU-JET		MaxPac AR700 A	ssembly		
_andRunner	Task	Procedures	Illustrations		
•	MaxPac AR700 row unit assembly	<ol> <li>MaxPac AR700 row Unit</li> <li>AM 2261 (1) backing plate, row unit AR 700 MaxPac row unit</li> <li>AM 2264 (1) assembly, AR700 MaxPac row unit</li> <li>BP 3034 (6) nut, hex, 3/4"-10, grade 2, plated</li> <li>BP 3035 (6) washer, lock, 3/4", plated</li> <li>BP 3095 (4) hex cap screw, 3/4"-10 x 8", grade 5, plated</li> </ol>	b e c d a		
		2. Insert (e) (BP 3095) hex cap screws, 3/4"-10 x 8", into holes in (a) (AM 2261) backing plate. Select backing plate holes to match toolbar tube size.  Raise (b) (AM 2264) Assembly, AR700 MaxPac row unit and insert 3/4" hex cap screws. Insert (e) (BP 3095) hex cap screws, 3/4"-10 x 8", into bottom holes of (a) (AM 2261) backing plate.			
		3. Place (d) (BP 3035) 3/4" lock washers and (c) (BP 3034) 3/4" hex nuts on each 3/4" hex cap screws.			
		4. Tighten all four hex cap screws.			

BLU-JET		MaxPac AR700 A	ssembly		
LandRunner	Task	Procedures	Illustrations		
•	Installation of edgebent shank	5. Insert (AP 2125) 1-1/4" x 2" edge bent shank.			
		6. Install two (BP 3141) 3/4" x 3" hex cap screws through row unit weldment and shank. Secure with (BP 3035) 3/4" lock washers and (BP 3034) 3/4" hex nuts.			
•	Installation of AAM 2623 MaxPac Basket	7. Attach (AM 2271) basket mount to MaxPac assembly with three (BP 3126) 1/2" hex cap screws from inside the MaxPac assembly through basket mount.	Basket mou		
		8. Secure with (BP 3043) 1/2" lock washers and (BP 3042) 1/2" hex nuts.			
•	Location of torsion arm mounting	For complete torsion arm assembly instructions consult Torsion Arm Manual 04000027			

		Basket				
andRunner	Task		Proce	dur	es	Illustrations
Bundle		1.	AM 2269	2	StripTill basket mounti	ing short 18-3/4"
Number		2.	AM 7568	1	StripTill torsion spring	
7021064	1	3.	AM 7615	1	Basket, striptill, 13-1/2	" OD x 14-1/4"
		4.	AP 2144	2	Bearing, 1", W/flange &	& lock collar
			BP 3012	4		14 x 1-1/2", grade 5, plated
			BP 3016	4	Nut, hex, 7/16"-14, grad	
			BP 3017	4		
			BP 3038	4		
			BP 3039		Washer, lock, 5/8", plan	
			BP 3042	2		
			BP 3043	2		
			BP 3126	4		3 x 1-1/2", grade 5, plated
			BP 3199 BP 3244	2		
			BP 3446	2		Name and the second
			BP 3300	2	U-bolt, 5/8"-11 x 2-1/2"	
					APPARENT.	A\
	12	0	0 1	4)	16	

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## **Torsion Arm Assembly**

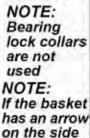
#### LandRunner

## Task

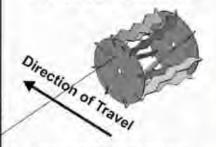
## **Procedures**

## Illustrations

- Attaching torsion spring assembly
- Attach (2) (AM 7568) StripTill torsion spring assembly to rear of row mounting with (16) (BP 3300) 5/8" x 2-1/2" x 4" u-bolts, (9) (BP 3039) 5/8" lock washers and (8) (BP 3038) 5/8" hex nuts.
- Attaching bearings and chopper basket to mounting arms
- Attach (4) (AP 2144) bearing
  1", with/flange on (1) (AM 2269)
  StripTill basket mounting short
  18-3/4" with (5) (BP 3012)
  7/16" x 1-1/2" hex cap screws,
  (7) (BP 3017) 7/16" lock washers
  and (6) (BP 3016) 7/16" hex
  nuts. Do not tighten hex nuts
  until the basket is installed.
  Insert (13) (BP 3199) 1"-8 x
  2-1/2" hex cap screw into
  both bearing arm assemblies.
- NOTE: Bearing lock collars not used
- Insert (3) (AM 7615) striptill basket over 1" x 2-1/2" hex cap screw. Install (15) (BP 3446) 1" center dimple lock nut. Place socket on 1" hex cap screw and tighten. Tighten bearing hex nuts.
- Position chopper basket on torsion spring assembly



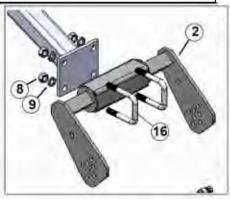
see diagram



Centering chopper basket

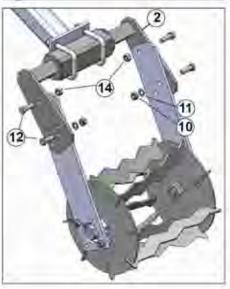
NOTE: Insert the basket arms to the inside of the StripTill torsion spring (2)  Position chopper basket assembly on torsion spring assembly. Insert (12) (BP 3126) 1/2" x 1-1/2" hex cap screws, top and bottom. Secure top pivot hex cap screws with (14) (BP 3244) 1/2" lock hex nuts. Secure lower adjustable hex cap screws with (11) (BP 3043) 1/2" lock washers and (10) (BP 3042) 1/2" hex nuts. Hex nuts may be tightened.

(Diagram shows a starting position.)











## Torsion Arm Basket Mounting Brackets Rigid Fertilizer Rows

#### LandRunner

Task Procedures

Illustrations



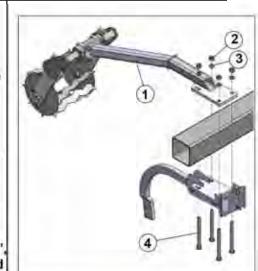
arms

Bundle 70210592 (6" x 6") 70210641

1. AM 2272 1 Basket mount, rigid/SCS, torsion arm basket mounting
2. BP 3034 4 Nut, hex, 3/4"-

10, grade 2, plated 3. BP 3035 4 Washer, lock,

3/4", plated 4. BP 3176 4 Hex cap screw, 3/4"-10 x 8-1/2", grade 5, plated



## Bundle 70210591 (4" x 6") 70210641

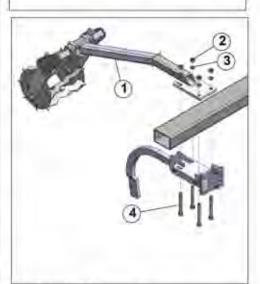
 AM 2272 1 Basket mount, rigid/SCS, torsion arm basket

mounting

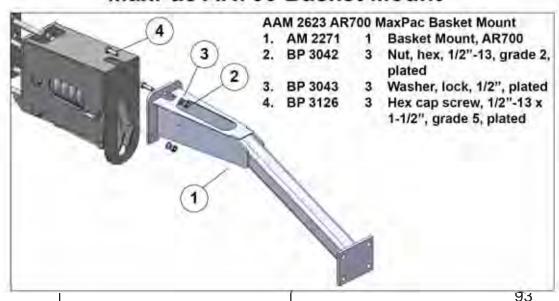
2. BP 3034 4 Nut, hex, 3/4"-10, grade 2, plated 3. BP 3035 4 Washer, lock.

 BP 3035 4 Washer, lock, 3/4", plated
 BP 3036 4 Hex cap screw

3/4"-10 x 6-1/2", grade 5, plated



## MaxPac AR700 Basket Mount



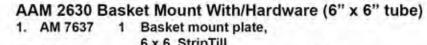
## **Basket Mount Flat With Hardware**

LandRunner

Task

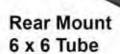
**Procedures** 

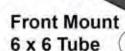
Illustrations

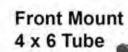


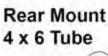
- 2. BP 3034
- 6 x 6, StripTill

  4 Nut, hex, 3/4"-10, grade 2, plated
- 3. BP 3035
- 4 Washer, lock, 3/4", plated
- 4. BP 3350
- 2 U-bolt, 3/4"-10 x 6" x 7-7/16", plated













- 1. AM 7637 1 Basket mount plate, 6 x 6, StripTill
- BP 3034
   Nut, hex, 3/4"-10, grade 2, plated
   BP 3035
   Washer, lock, 3/4", plated
- 4. BP 3334 2 U-bolt, 3/4"-10 x 6" x 5-7/16", plated



Front Mount



Rear Mount



## **Torque Specifications**

LandRunner Task Procedures Illustrations

## SAE FASTENER TORQUE CHART

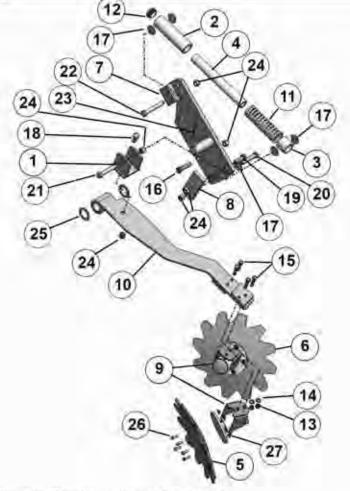
NOTE: Use these torque's, unless special torque's are specified. Values are for UNC and UNF thread fasteners, plated or unplated, as received from supplier. Fasteners can be dry or lubricated with normal engine oil. Values do not apply if graphite, moly-disulphide or other extreme pressure lubricant is used.

SAE Grade No.	2				5			*8				
Bolt head	Bolt head							$\overline{}$				
identification (see		( )			(-') ( ') ( \ \ )			( \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Note 1)	,		_/								/_/	
Dolt Size	LB	FT	N	Nm		LB FT		Nm		FT	Nm	
Bolt Size	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4	5	6	7	8	9	11	12	15	12	15	16	20
5/16	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	20	23	27	31	35	42	48	57	45	54	61	73
7/16	30	35	41	47	54	64	73	87	70	84	95	114
1/2	45	52	61	70	80	96	109	130	110	132	149	179
9/16	65	75	88	102	110	132	149	179	160	192	217	260
5/8	95	105	129	142	150	180	203	244	220	264	298	358
3/4	150	185	203	251	270	324	366	439	380	456	515	618
7/8	160	200	217	271	400	480	542	651	600	720	814	976
1	250	300	339	406	580	696	787	944	900	1080	1220	1464
1 1/8					800	880	1085	1193	1280	1440	1736	1953
1 1/14	ėT1.	ick nuts n	ust be		1120	1240	1519	1681	1820	2000	2468	2712
1 3/8		l with Gra			1460	1680	1980	2278	2380	2720	3227	3688
1 1/2	Luser		L C COIL		1940	2200	2631	2983	3160	3560	4285	4827
NOTE 1: Bolt head ider	NOTE 1: Bolt head identification mark as per grade. Manufacturing marks will vary.											



## StripTill Residue Manager

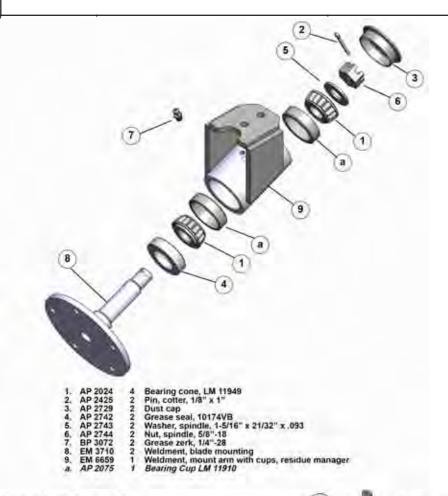
LandRunner Bundle Number 70210646



AM 2489 Clevis, sealer spring, lower 2. AM 2490 Tube, upper spring, plated 3. AM 2491 Bushing, spring collar, plated Tube, spring guide, plated Blade, 3/16" x 12-1/2" LH, residue manager Blade, 3/16" x 12-1/2" RH, residue manager AM 2492 AM 7662 AM 7663 7. AM 7667 Bracket, pivot arm/spring mounting, residue manager AM 7669 Bracket, arm stop, residue manager 8. AM 7670 Assembly, blade mounting, residue manager Mount arm w/pivot tube, bolt on blade mounting 9. 10. AM 7671 Spring, 1.75 OD x 1,313 ID x 6.00 OAL 11. AP 2997 Plug, tube, 1-5/16" ID, Black, Nut, hex, 3/8"-16, grade 2, plated 12. AP 3116 4 Nut, hex, 3/8"-16, grade 2, plated
4 Washer, lock, 3/8", plated
4 Hex cap screw, 3/8"-16 x 1-1/2", grade 5, plated
1 Hex cap screw, 1/2"-13 x 2", grade 5, plated
5 Washer, flat, 1/2", plated
1 Hex cap screw, 1/2"-13 x 1", grade 5, plated
2 Hex cap screw, 1/2"-13 x 1-1/2", grade 5, plated
1 Hex cap screw, 1/2"-13 x 2-1/2", grade 5, plated
1 Hex cap screw, 1/2"-13 x 3", grade 5, plated
1 Hex cap screw, 1/2"-13 x 3-1/2", grade 5, plated
1 Hex cap screw, 1/2"-13 x 3-1/2", grade 5, plated
2 Pin, roll, 3/8" x 2", plated
3 Nut, hex lock, 1/2"-13, plated
4 Machinery bushing, 1-7/8" OD x 1-1/4" ID, 14GA
5 Hex flange bolt, 1/4"-20 x 3/4", grade 8, plated
6 Nut, hex flange, 1/4"-20 serrated, grade 2, plated 13. BP 3001 14. BP 3002 15. BP 3005 16. BP 3041 17. BP 3050 18. BP 3125 19. BP 3126 20. BP 3128 21. BP 3129 22. BP 3130 23. BP 3162 24. BP 3244 25. BP 3249 26. BP 3366 27. BP 3367 10 Nut, hex flange, 1/4"-20 serrated, grade 2, plated

## AM 7670 Blade Mounting Assembly & Coulter Shank Extension Brackets

#### LandRunner

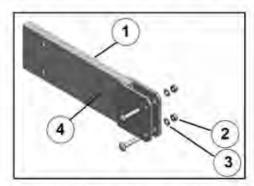


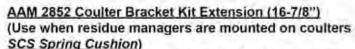
## MAXPAC W/Coulter

## AAM 2637 Coulter Bracket Extension Kit 9-7/8"

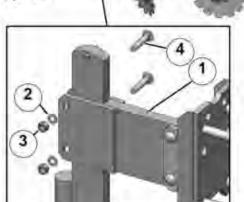
(Use when residue managers are mounted on coulters.)

- 1. AM 2622 Bracket, coulter shank extension, (9-7/8")
- 2. BP 3042 Nut, hex, 1/2"-13, grade 2, plated
- 3. BP 3043 2
- Washer, lock, 1/2", plated
- 4. BP 3229 Bolt, carriage, 1/2"-13 x 2-1/2", grade 5, plated





- 1. AM 2268 Bracket, coulter shank extension, 16-7/8"
- 2. BP 3042 2 Nut, hex, 1/2"-13, grade 2, plated
- BP 3043 2 Washer, lock, 1/2", plated
- 2 Bolt, carriage, 1/2"-13 x 2-1/2", grade 5, plated BP 3229



## **Residue Manager Assembly**

#### LandRunner

## Task

## **Procedures**

## Illustrations

Mounting residue manager blade

assembly

Place (10) (AM 7671) mounting arm upside down and install (9) (AM 7670) blade mount on the raised weldment and insert two (15) (BP 3005) 3/8" x 1-1/2" from the top. Place (14) (BP 3002) 3/8" lock washers and (13) (BP 3001) 3/8" hex nuts on hex cap screws.



NOTE: Right-hand and left-hand as viewed from the rear

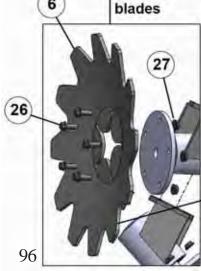
Install (9) (AM 7670) blade mount on lower weldment and insert two (15) (BP3005) 3/8" x 1-1/2" from the top. Place (14) (BP 3002) 3/8" lock washers and (13) (BP 3001) 3/8" hex nuts on hex cap screws.



Tighten all four 3/8" hex nuts 3. on the blade mounts.



Mounting residue manager



Attach (6) (AM 7663) right-hand blade to hub on the raised blade mount with five (26) (BP 3366) 1/4" x 3/4" hex flange bolts and (27) (BP 3367) 1/4" hex flange nuts serrated.



NOTE: Leading edge towards tractor.

BLU-JET		Residue Manager	Assembly
ndRunner	Task	Procedures	Illustrations
	Mounting residue manager blades	Tighten 1/4" hex flange nuts serrated.	
		6. Attach (5) (AM 7662) left-hand blade to hub on the raised blade mount with five (26) (BP 3366) 1/4" x 3/4" hex flange bolts and (27) (BP 3367) 1/4" hex flange nuts serrated.	5
		7. Tighten 1/4" hex flange nuts serrated.	

## **Residue Manager Assembly**

#### LandRunner

#### Task

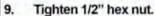
#### **Procedures**

## Illustrations

## Mounting Spring clevis

8. Attach (1) (AM 2489) lower sealer spring clevis with (18) (BP 3125) 1/2" x 1" hex cap screw and (24) (BP 3244) 1/2" hex lock nut. NOTE the hole is off centered. Position long edge toward the blades.

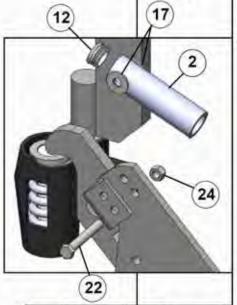


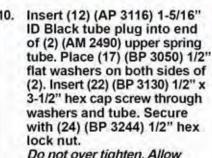








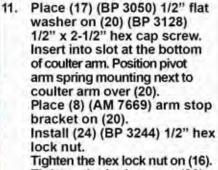




Do not over tighten. Allow tubes to pivot.

Attach (7) (AM 7667) pivot arm spring mounting bracket on coulter arm with (16) (BP 3041) 1/2" x 2" hex cap screw. Place (24) (BP 3244) on hex cap screw on 1/2" hex nut.







lock nut.
Tighten the hex lock nut on (16).
Tighten the lock nut on (20)
until snug. The arm stop must
rotate down so the spring
assembly can be installed
before (19) (BP 3126) 1/2" x
1-1/2" hex cap screw is installed.



BLU-JET		Residue Manager			
LandRunner		Procedures	Illustrations		
	Attaching bolt on blade arm mount	12. Place (25) (BP 3249) 1-7/8" OD x 1-1/4" ID machinery bushing on pivot weldment.	25		
		13. Slide (10) (AM 7671) bolt on blade arm mount on pivot arm.	10		
		14. Place (25) (BP 3249) 1-7/8" OD x 1-1/4" ID machinery bushing on pivot weldment.			
		15. Secure arm to weldment with (23) (BP 3162) 3/8" roll pin.	25		

# BLU-JET LandRunner

## **Residue Manager Assembly**

## Task

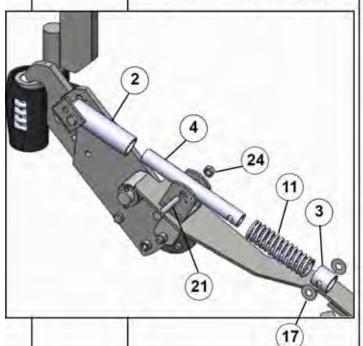
## **Procedures**

## Illustrations



- Insert (4) (AM 2492) spring guide tube into (2) (AM 2490) upper spring tube. Place (11) (AP 2997) spring over guide.
- Place (3) (AM 2491) spring collar bushing over guide.
- Raise arm insert (21) (BP 3129) 1/2" x 3" hex cap screw through (14) (BP 3050) 1/2" washers and (3) spring collar bushing and second washer. Secure with (24) (BP 3244) 1/2" hex lock nut. Do not over tighten. Allow tubes to picot tighten. Allow tubes to pivot.









## **Residue Manager Assembly**

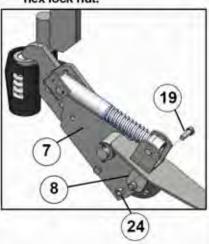
## **LandRunner** Task

## **Procedures**

## Illustrations



19. Rotate arm stop bracket (8) under residue manager arm and Insert (19) (BP 3126) 1/2" x 1-1/2" hex cap screw from the hub side through coulter arm, (7) and (8) arm stop bracket. Secure with (24) (BP 3244) 1/2" hex lock nut.

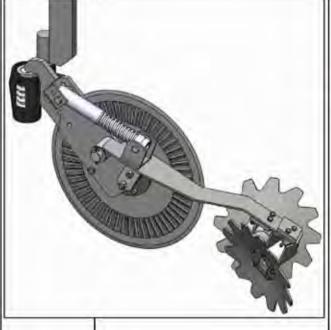


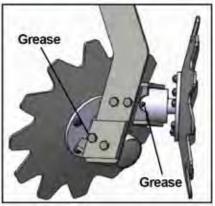
- Tighten the 1/2" hex lock nuts on (16) (19) and (20) on (8) pivot arm bracket.
- 21. Grease hubs.











BLU-JET
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## **Hydraulic Repair Kits**

			Trydradiio Repair Rits							
L	andRunner	Task	Procedure	es .		Illustrations				
	MFG# <b>TMC #</b> SAE-34024 DP 4248	Bore/ Stroke 4" X 24"	Repair Kit PMCK-SAE-34000 DP 4310	Clevis 100000326 DP 4115	Butt 141900037 DP 4270	<b>Gland</b> 081900354 DP 4326				
	SAE-34020 DP 4375	4" X 20"	PMCK-SAE-34000 DP 4310	100000326 DP 4115	141900037 DP 4270	081900354 DP 4326				
	SAE-34524 DP 4481	4-1/2" X 24"	PMCK-SAE-34500 DP 4503	100000362 DP 4114	142000017 DP 4507	082000109 DP 4508				
	PMS-AM-2570 DP 4483	3-1/4" X 12"	PMCK-AM-2570 DP 4465	100000423 DP 4116	141600002 DP 4463	081600038 DP 4464				
	PMS-AM-2564 DP 4484	3-1/2" X 12"	PMCK-AM-2564 DP 4466	100000423 DP 4116	41700023 DP 4319	081700269 DP 4281				
	PMS-AM-2558 DP 4485	3-3/4" X 12"	PMCK-AM-2558A DP 4467	100000577 DP 3996	141800009 DP 4297	081800022 DP 4280				
	PMS-AM-2552 DP 4486	4" X 12"	PMCK-AM-2552A DP 4468	100000577 DP 3996	141900037 DP 4270	081900374 DP 4279				
	PMS-AM-2546 DP 4487	4-1/2" X 12"	PMCK-AM-2546 DP 4469	100000326 DP 4115	142000004 DP 4219	082000092 DP 4278				
	MEO #	Dore/				4 Por	2 Pag	4 Por		
	MFG# <b>TMC #</b> SAE-34024 DP 4248	Bore/ Stroke 4" X 24"	<b>Piston</b> 071900260 DP 4328	<b>Piston Rod</b> 011000324 DP 4336	<b>Barrel</b> 051900015 DP 4347	4 Req Tie Rod 170301292 DP 4352	<b>2 Req Clevis Pin</b> 190400035 BP 3497	4 Req Cotter Pin 220001504 BP 3511		
	AR-89 DP 4249	3-1/2" X 12	071700174 DP 4327	010700434 DP 4332	051700011 DP 4342	170201161 DP 4348	190400035 BP 3497	220001504 BP 3511		
	SAE-34020 DP 4375	4" X 20"	071900260 DP 4328	011000323 DP 4357	051900014 DP 4353	170301252 DP 4354	190400035 BP 3497	220001504 BP 3511		
	SAE-34524 DP 4481	4-1/2" X 24"	072000081 DP 4509	011100787 DP 4504	052000168 DP 4505	170301297 DP 4506	190600024 BP 3498	220001504 BP 3511		
	PMS-AM-2570 DP 4483	3-1/4" X 12"	071600025 DP 4236	010600379 DP 4208	061600028 DP 4338	170201161 DP 4348	190400001 BP 3403	220001504 BP 3511		
	PMS-AM-2564 DP 4484	3-1/2" X 12"	071700208 DP 4235	010600379 DP 4208	061700366 DP 4337	170201161 DP 4348	190400001 BP 3403	220001504 BP 3511		
	PMS-AM-2558 DP 4485	3-3/4" X 12"	071800021 DP 4234	010700698 DP 3998	061800022 DP 4339	170301172 DP 4349	190400004 BP 3514	220001504 BP 3511		
	PMS-AM-2552 DP 4486	4" X 12"	071900273 DP 4232	010700698 DP 3998	061900598 DP 4340	170301172 DP 4349	190400004 BP 3514	220001504 BP 3511		
	PMS-AM-2546 DP 4487	4-1/2" X 12"	072000097 DP 4233	011100737 DP 4218	062000080 DP 4341	170301175 DP 4350	190400004 BP 3514	220001504 BP 3511		

	BLU-JET	Tie-rod (	Cylinder Disassembly - A	bly - Assembly Procedure				
Lá	andRunner	Task	Procedures	Illustrations				

With cylinder removed from machine, clean, drained of oil and fully retracted, proceed as follows:

#### Disassembly:

- 1. Secure cylinder in vice or other method to prevent rotation. With the immediate area clean of dirt so parts can be laid out.
- 2. Remove tie-rod nuts item (1)
- 3. Pull rod assembly from cylinder. Remove tube item (3)
- 4. Loosen nut item (4) and remove clevis item (5) from rod assembly.
- 5. Place rod assembly in vice with copper or brass jaws so as not to damage.
- 6. Remove all seals from item (6), (8), and (9) for replacement. Clean and inspect all parts, for damage (nicks, scratches, cracks and etc.) replace as necessary. If you have any question please contact Prince Engineering (712) 235-1220.

#### Reassembly:

- 1. Replace all seals in items (6), (8), and (9). Do not replace small O-ring on ID of piston item (8) until ready to attach rod item (2).
- 2. Place small ID O-ring seal for piston over rod turndown and apply light coat of grease to seal. Slip piston item (8) onto turndown with ID counter bore towards rod shoulder. Take care not to pinch O-ring between piston and rod shoulder. Replace nut item (7) and secure.
- 3. Apply light coat of grease to seals in gland item (6) and slip gland over rod end, carefully so as not to damage seals. Slip entire assembly into lightly oiled tube item (3) piston first. Insure tube slips up over OD seals of gland.
- 4. Take total assembly in step 3 and slip tube over OD seal on butt item (9). Align ports in butt and gland and apply nuts item (1) to tie-rods and toque uniformly.

  Tierod

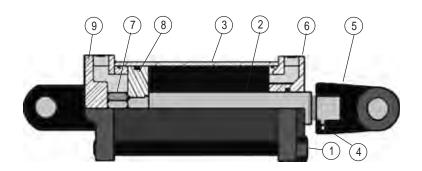
3/8" tierods 20-23 ft./lbs. (27-31 Nm)

1/2" tierods 45-52 ft./lbs. (61-70 Nm)

5/8" tierods 95-105 ft./lbs. (129-142 Nm)

3/4" tierods 150-165 ft./lbs (203-224 Nm)

5. Test for leaks and reinstall in machine. If you have any problems contact Prince Engineering (712) 235-1220.





## **Torque Specifications**

**LandRunner** Task

ask Procedures

Illustrations

#### SAE FASTENER TORQUE CHART

**NOTE:** Use these torque's, unless special torque's are specified. Values are for UNC and UNF thread fasteners, plated or unplated, as received from supplier. Fasteners can be dry or lubricated with normal engine oil. Values do not apply if graphite, moly-disulphide or other extreme pressure lubricant is used.

SAE Grade No.	2			5		*8						
Bolt head			$\neg$		/ /	\	$\overline{}$			\	_ /	
identification				$ \langle - \langle \rangle \leftarrow \rangle \langle - \langle \rangle $		$ \langle + \rangle \langle + \rangle \langle - \rangle  $						
(see Note 1)		_	_/		\	/ \_		/		/ \_	_/ \	
Dolt Ciza	LB	FT	N	lm	LB	FT	N	lm	LB	FT	N	lm
Bolt Size	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4	5	6	7	8	9	11	12	15	12	15	16	20
5/16	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	20	23	27	31	35	42	48	57	45	54	61	73
7/16	30	35	41	47	54	64	73	87	70	84	95	114
1/2	45	52	61	70	80	96	109	130	110	132	149	179
9/16	65	75	88	102	110	132	149	179	160	192	217	260
5/8	95	105	129	142	150	180	203	244	220	264	298	358
3/4	150	185	203	251	270	324	366	439	380	456	515	618
7/8	160	200	217	271	400	480	542	651	600	720	814	976
1	250	300	339	406	580	696	787	944	900	1080	1220	1464
1 1/8					800	880	1085	1193	1280	1440	1736	1953
1 1/14	1 1/14 *Thick nuts must be		1120	1240	1519	1681	1820	2000	2468	2712		
1 3/8 used with Grade 8 bolts		1460	1680	1980	2278	2380	2720	3227	3688			
1 1/2				1940	2200	2631	2983	3160	3560	4285	4827	
NO TE 1: Bolt head identification mark as per grade. Manufacturing marks will vary.												

## STANDARD TORQUE DATA HYDRAULIC TUBES AND FITTINGS

O-ring boss Plugs, Adjustable Fitting Lock nuts, Swivel JIC-37<sup>0</sup> Seats

	LB	FT	Nm			
SIZE	Min.	Max.	Min.	Max.		
4	6	10	8	14		
5	10	15	14	20		
6	15	20	20	27		
8	25	30	34	41		
10	35	40	47	54		
12	60	70	81	95		
14	70	80	95	109		
16	80	90	108	122		
20	95	115	129	156		
24	120	140	163	190		
32	250	300	339	407		

Above torque figures are recommended for plain, cadmium or zinc plated fittings, dry or wet installations and swivel nuts either swaged or brazed.