

Demco

manufacturing

Dethmers Manufacturing Company



SIDE Quest™
by **Demco**
U.S. Patent No. 6,286,870

ASSEMBLY
CALIBRATION
OPERATION
REPLACEMENT PARTS

READ complete manual CAREFULLY
BEFORE attempting operation.

Doing Our Best To Provide You The Best

MANUAL
OPERATORS

Thank you for purchasing Demco's SIDEQUEST. We feel you have made a wise choice and hope you are completely satisfied with your SIDEQUEST. If you have any questions regarding the applications of certain solutions or chemicals, contact your chemical supplier and follow chemical manufacturer recommendations as well as all licensing and use restrictions or regulations.



WARNING: TO AVOID PERSONAL INJURY OR PROPERTY DAMAGE, OBSERVE FOLLOWING INSTRUCTIONS:

Chemicals are dangerous. Know exactly what you're going to do and what is going to happen before attempting to work with these products. Improper selection or use can injure people, animals, plants and soil.

Always wear protective clothing such as coveralls, goggles and gloves when working with chemicals or sprayer.

Be sure to dispose of all unused chemicals or solutions in a proper and ecologically sound manner.

GENERAL INFORMATION

1. Unless otherwise specified, high-strength (grade5) (3 radial-line head markings) hex head bolts are used throughout assembly of this sprayer.
2. Whenever terms "**LEFT**" and "**RIGHT**" are used in this manual it means from a position behind sprayer and facing forward.
3. When placing a parts order, refer to this manual for proper part numbers and place order by **PART NO. and DESCRIPTION.**

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Warranty Registration

Dethmers Manufacturing Company
4010 320th Street • Box 189 • Boyden, Iowa 51234
Toll Free 800-54DEMCO (800-543-3626) • FAX 800-845-6420
www.demco-products.com

Ag	<input type="radio"/>
RV	<input type="radio"/>
Rental	<input type="radio"/>
Brakes	<input type="radio"/>
Marine	<input type="radio"/>

	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
How satisfied are you with our product?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How satisfied are you with the dealership/distributor sales staff?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dealer/Distributor Name _____ City _____ State _____				
How satisfied are you with the company sales staff?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How satisfied are you with the delivery?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did you have any contact with a Demco Representative? If YES , how satisfied were you?	YES <input type="radio"/>	NO <input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend this product to my family and friends.	YES	NO		
Would you purchase again from DEMCO?	YES	NO		
Since taking delivery, have you been contacted by the dealer?	YES	NO		
Did you have any problems with this DEMCO product? If YES , are you satisfied with the company's resolution of your problem?	YES <input type="radio"/>	NO <input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Why did you purchase this product? _____

Please list the specific source of information prompting this purchase.

After purchasing this product, do you see any needed product improvement? _____ If yes, what improvement? _____

What other products would you like to see DEMCO offer? _____

Comments _____

Owner's Name: _____ Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Model#: _____

Serial #: _____

Purchase Date: _____

Owner's Signature: _____

Please return to DETHMERS MFG. CO. By FAX or tri-folding this form to the backside, it is pre-addressed.

Postage

*Dethmers Manufacturing Company
4010 320th Street, Box 189
Boyden, Iowa 51234*

SAFETY

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.



**THIS SYMBOL MEANS
ATTENTION
BECOME ALERT
YOUR SAFETY IS INVOLVED!**

SIGNAL WORDS

Note: use of the following signal words **DANGER**, **WARNING**, and **CAUTION** with safety messages. Appropriate signal word for each has been selected using following guidelines:

DANGER:

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING:

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION:

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have questions not answered in this manual, require additional copies, or if your manual is damaged, please contact your dealer or Dethmers Mfg. Co., P.O. Box 189, 4010 320th Street, Boyden, IA 51234
ph: (712) 725-2311 or (712) 725-2302 Toll Free: 1-800-543-3626 Fax: (712) 725-2380
<http://www.demco-products.com>



SAFETY...YOU CAN LIVE WITH IT



EQUIPMENT SAFETY GUIDELINES

Every year many accidents occur which could be avoided by a few seconds of thought and more careful approach to handling equipment. You, the operator, can avoid accidents by observing precautions in this section. To avoid personal injury, study precautions and insist those working with you, or you yourself, follow them.

In order to provide a better view, certain illustrations in this manual may show an assembly with a safety shield removed. However, sprayer should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace shield prior to use.

Replace any caution, warning, danger or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this sprayer under the influence of alcohol or drugs.

Review safety instructions with all users.

Operator should be a responsible adult. **DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS SPRAYER UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.**

To prevent injury or death, use a tractor equipped with a roll over protective system (ROPS). Do not paint over, remove, or deface any safety signs or warning decals on your sprayer. Observe all safety signs and practice instructions on them.

Never exceed limits of sprayer. If its ability to do a job, or to do so safely is in question **DON'T TRY IT.**



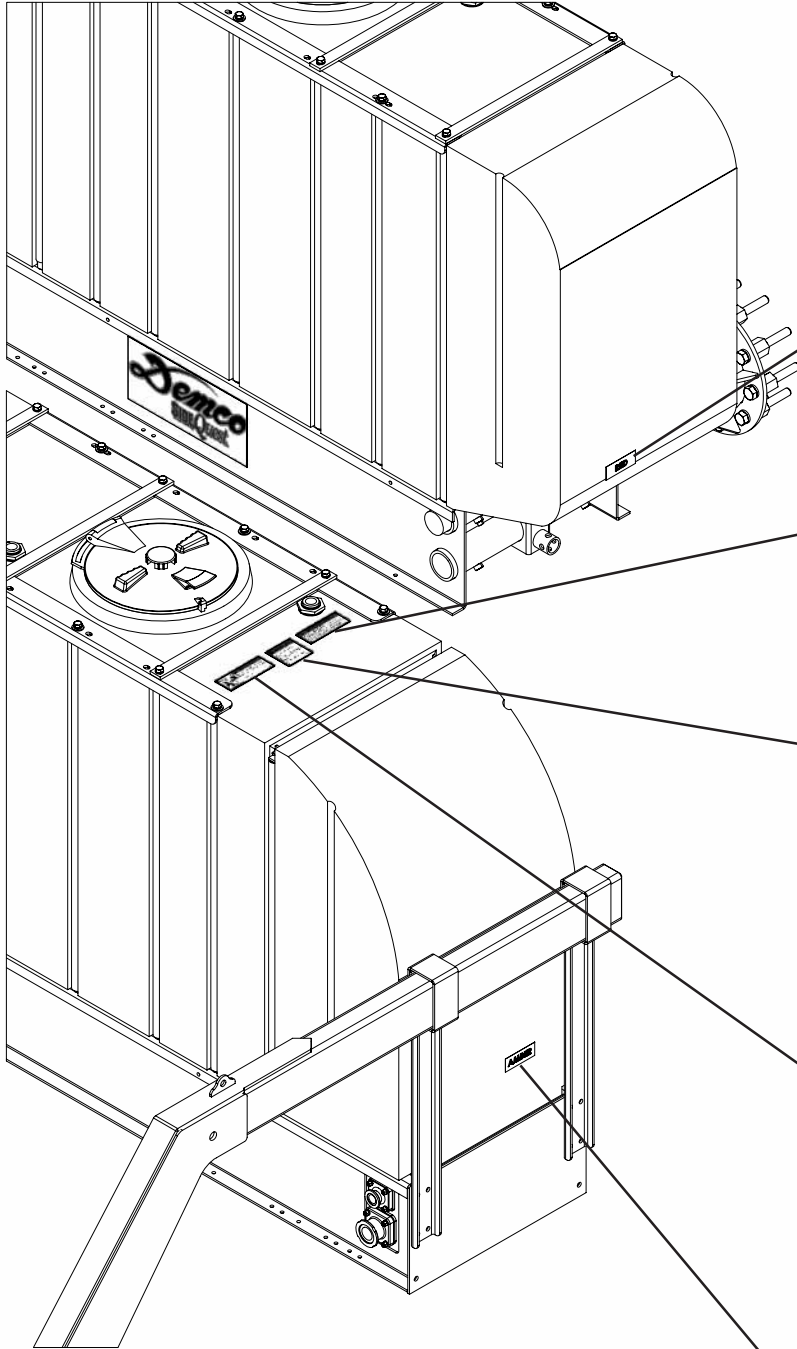
LIGHTING AND MARKING

It is the responsibility of operator to know lighting and marking requirements of local highway authorities and to install and maintain equipment to provide compliance with regulations. Add extra lights when transporting at night or during periods of limited visibility.


Lighting kits are available from your dealer or manufacturer.



SAFETY SIGN LOCATIONS



Part# 10328 Red
(on back side of tank)

 **WARNING**

To prevent serious injury or death

- Refer to chemical supplier and manufacturer recommendations and all licensing restrictions or regulations.
- Always wear recommended protective clothing when working with chemicals or sprayer.
- Dispose of all unused chemicals or solutions in proper and ecologically sound manner. Improper use can injure people, animals, plants and soil.

REV 1 AB21014

AB21014

 **WARNING**


To prevent serious injury or death.

Do not ride or stand on sprayer while any part of sprayer is moving.

Keep riders off at all times.

REV 1 AB21001

AB21001

 **WARNING**

To prevent serious injury or death

- Store sprayer on hard level surface.
- Store empty.

REV 1 AB21002

AB21002



Part# 10327 Amber



SAFETY SIGN CARE

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replacement parts that displayed a safety sign should also display current sign.
- Safety signs are available from your distributor, dealer parts department, or manufacturer.

How to install safety signs:

- Be sure installation area is clean and dry.
- Decide on exact position before you remove backing paper.
- Remove smallest portion of split backing paper.
- Align decal over specified area and carefully press small portion with exposed sticky backing in place.
- Slowly peel back remaining paper and carefully smooth remaining portion of decal into place.
- Small air pockets can be pierced with a pin and smoothed out using piece of decal backing paper.



TIRE SAFETY

- Failure to follow proper procedures when mounting tire on rim can produce an explosion resulting in serious injury or death.
- Do not attempt to mount tire unless you have proper equipment and experience.
- Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service or mount tires.
- Always order and install tires and wheels with appropriate type and load capacity to meet or exceed anticipated weight to be placed on sprayer.



REMEMBER

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or manufacturer.



BEFORE OPERATION:

- Carefully study and understand this manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- It is recommended that suitable hearing and eye protection be worn.
- Operator may come in contact with certain materials which may require specific safety equipment relative to handling of such materials. (Examples: extremely dusty, molds, fungus, bulk fertilizers, etc.)

- Keep wheel and lug nuts tightened to specified torque.
- Assure that agricultural implement tires are inflated evenly.
- Give sprayer a visual inspection for any loose bolts, worn parts, or cracked welds, and make necessary repairs. Follow maintenance safety instructions included in this manual.
- Be sure there are no tools lying on or in equipment.
- Do not use the sprayer until you are sure that area is clear, especially around children and animals.
- Don't hurry learning process or take sprayer for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your sprayer and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Use a tractor equipped with Roll Over Protection System (ROPS) and fasten your seat belt prior to starting engine.
- Manufacturer does not recommend usage of tractor with ROPS removed.
- Move tractor wheels to widest recommended settings to increase stability.
- Do not allow anyone to stand between tongue or hitch and towing unit when backing up to equipment.



DURING OPERATION

- Beware of bystanders, **PARTICULARLY CHILDREN!** Always look around to make sure it is safe to start engine of towing unit or move sprayer. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.
- **NO PASSENGERS ALLOWED-** Do not carry passengers anywhere on or in the tractor or sprayer.
- Keep hands and clothing clear of moving parts.
- Do not clean, lubricate, or adjust your sprayer while it is moving.
- When halting operation, even periodically, set tractor or towing unit brakes, disengage PTO, shut off engine, and **remove ignition key.**
- Be especially observant of operating area and terrain- watch for holes, rocks, or other hidden hazards. Always inspect area prior to operation.
 - DO NOT operate near edge of drop-offs or banks.
 - DO NOT operate on steep slopes as overturn may result.
 - Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops.

- Pick the most level possible route when transporting across fields. Avoid edges of ditches, gullies, and steep hillsides.
- Be extra careful when working on inclines.
- Periodically clear equipment of brush, twigs, or other materials to prevent buildup of dry combustible materials.
- Maneuver tractor or towing unit at safe speeds.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose gravel, rocks, and holes; they can be dangerous for equipment operation or movement.
- Allow for sprayer length when making turns.
- Do not walk or work under raised components or attachments unless securely positioned and blocked.
- Keep all bystanders, pets, and livestock clear of work area.
- Operate towing unit from operators seat only.
- Never stand alongside of unit with engine running or attempt to start engine and/or operate machine while standing alongside of unit.
- Never leave running equipment attachments unattended.
- As a precaution, always recheck hardware on equipment following every 100 hours of operation. Correct all problems. Follow maintenance safety procedures.



FOLLOWING OPERATION

- Following operation, or when unhitching, stop tractor or towing unit, set brakes, disengage PTO and all power drives, shut off engine and **remove ignition key**.
- Store sprayer in an area away from human activity.
- Do not park sprayer where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around the stored sprayer.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.
- Wheel chocks may be needed to prevent unit from rolling.



HIGHWAY AND TRANSPORT OPERATIONS

- **SAFETY CHAINS:** If equipment is going to be transported on a public highway, always follow state and local regulations regarding safety chains and auxiliary lighting. Be sure to check with local law enforcement agencies for your own particular regulations. If required safety chains should be obtained and installed. Only safety chains (not elastic or nylon/plastic tow straps) should be used to retain connection between towing and towed machines in event of separation of primary attaching system. Use a high strength, appropriately sized hitch pin with a mechanical retainer and attach safety chains. Criss cross chains under tongue and secure to draw bar cage, mounting loops, or bumper frame.
- Adopt safe driving practices:
 - Keep brake pedals latched together at all times. **NEVER USE INDEPENDENT BRAKING WITH SPRAYER IN TOW. LOSS OF CONTROL OR UPSET MAY RESULT.**
 - Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop. Keep speed to a minimum.
 - Reduce speed prior to turns to avoid risk of overturning.
 - Always keep tractor or towing unit 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 flags and necessary warning devices to protect operators of other vehicles on highway during transport. Various safety lights and devices are available from your dealer.
- 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 tractor and sprayer under 20 mph (40 kph) day or night, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Be observant of bridge load ratings. Do not cross bridges rated lower than gross weight of unit you are operating.

- Watch for obstructions overhead and side to side while transporting.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of sprayer when making turns, or stopping.



PERFORMING MAINTENANCE

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Make sure there is plenty of ventilation. Never operate engine of towing vehicle in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on this machine, stop towing vehicle, set brakes, disengage PTO and all power drives, shut off engine and **remove ignition key**.
- Be certain all moving parts and attachments have come to a complete stop before attempting to perform maintenance.
- Always use a safety support and block wheels. Never use a jack to support machine.
- Always use proper tools or equipment for job at hand.
- Use extreme caution when making adjustments.
- Follow torque chart in this manual when tightening bolts and nuts.
- Never use your hands to locate a hydraulic leak on attachments. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate skin.
- Openings in skin and minor cuts are susceptible to infection from hydraulic fluid. **Without immediate medical treatment, serious infection and reactions can occur.**
- When disconnecting hydraulic lines, shut off hydraulic supply and relieve all hydraulic pressure.
- Replace **all shields** and **guards** after servicing and before moving.
- After servicing, be sure all tools, parts and service equipment are removed.
- Do not allow grease or oil to build up on any steps or platform.
- When replacing bolts refer to owners manual.
- Refer to bolt torque chart for head identification marking.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. Manufacturer will not claim responsibility for use of unapproved parts or accessories and other damages as a result of their use.
- If equipment has been altered in any way from original design, manufacturer does not accept any liability for injury or warranty.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment

BOLT TORQUE

TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAPSCREWS.

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as guide. Replace hardware with same grade bolt.

NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.



Torque Specifications

Bolt Torque for Standard bolts *

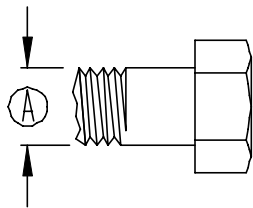
"A"	GRADE 2		GRADE 5		GRADE 8	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
1/4"	6	(8)	9	(12)	12	(16)
5/16"	10	(13)	18	(25)	25	(35)
3/8"	20	(27)	30	(40)	45	(60)
7/16"	30	(40)	50	(70)	80	(110)
1/2"	45	(60)	75	(100)	115	(155)
9/16"	70	(95)	115	(155)	165	(220)
5/8"	95	(130)	150	(200)	225	(300)
3/4"	165	(225)	290	(390)	400	(540)
7/8"	170	(230)	420	(570)	650	(880)
1"	225	(300)	630	(850)	970	(1310)

Bolt Torque for Metric bolts *

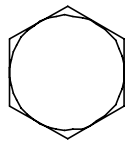
"A"	CLASS 8.8		CLASS 9.8		CLASS 10.9	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
6	9	(13)	10	(14)	13	(17)
7	15	(21)	18	(24)	21	(29)
8	23	(31)	25	(34)	31	(42)
10	45	(61)	50	(68)	61	(83)
12	78	(106)	88	(118)	106	(144)
14	125	(169)	140	(189)	170	(230)
16	194	(263)	216	(293)	263	(357)
18	268	(363)	--	--	364	(493)
20	378	(513)	--	--	515	(689)
22	516	(699)	--	--	702	(952)
24	654	(886)	--	--	890	(1206)

Torque figures indicated are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

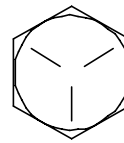
* GRADE or CLASS value for bolts and capscrews are identified by their head markings.



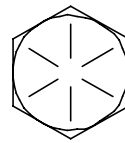
GRADE-2



GRADE-5



GRADE-8



CLASS 8.8



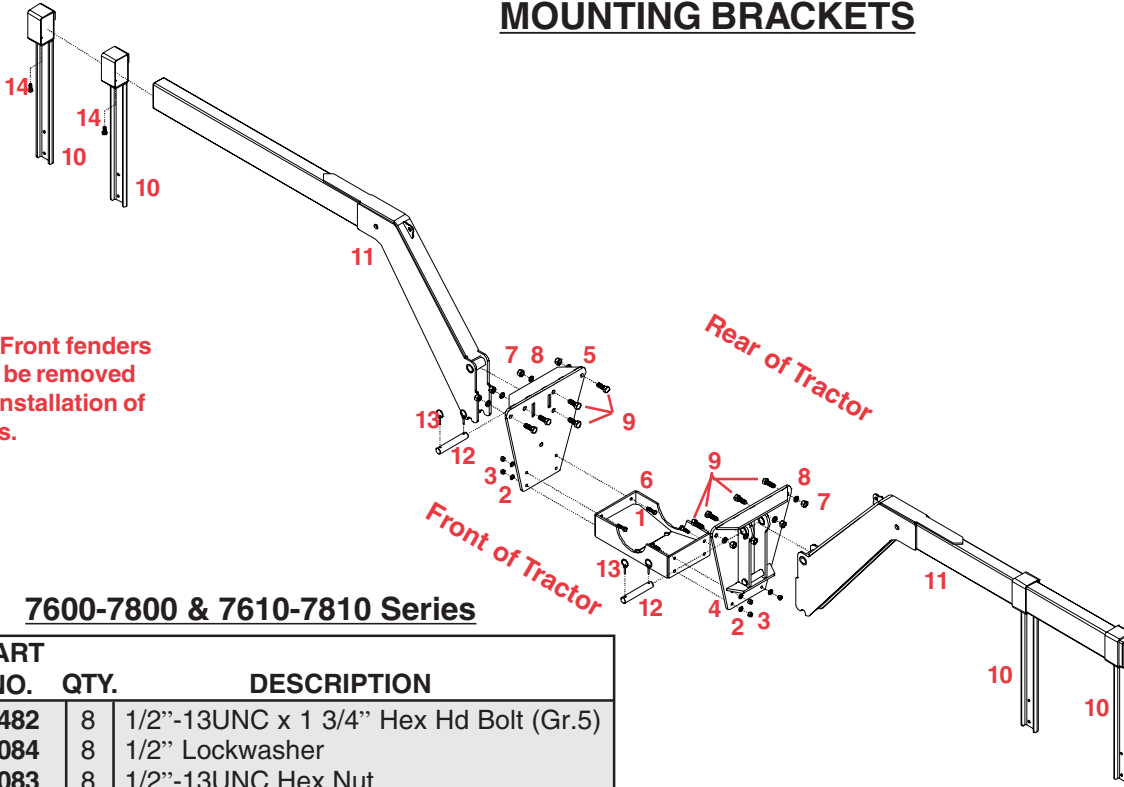
CLASS 9.8



CLASS 10.9



JOHN DEERE 7510, 7520, 7600, 7700, 7800, 7610, 7710, 7810 OVER-HEAD MOUNTING BRACKETS



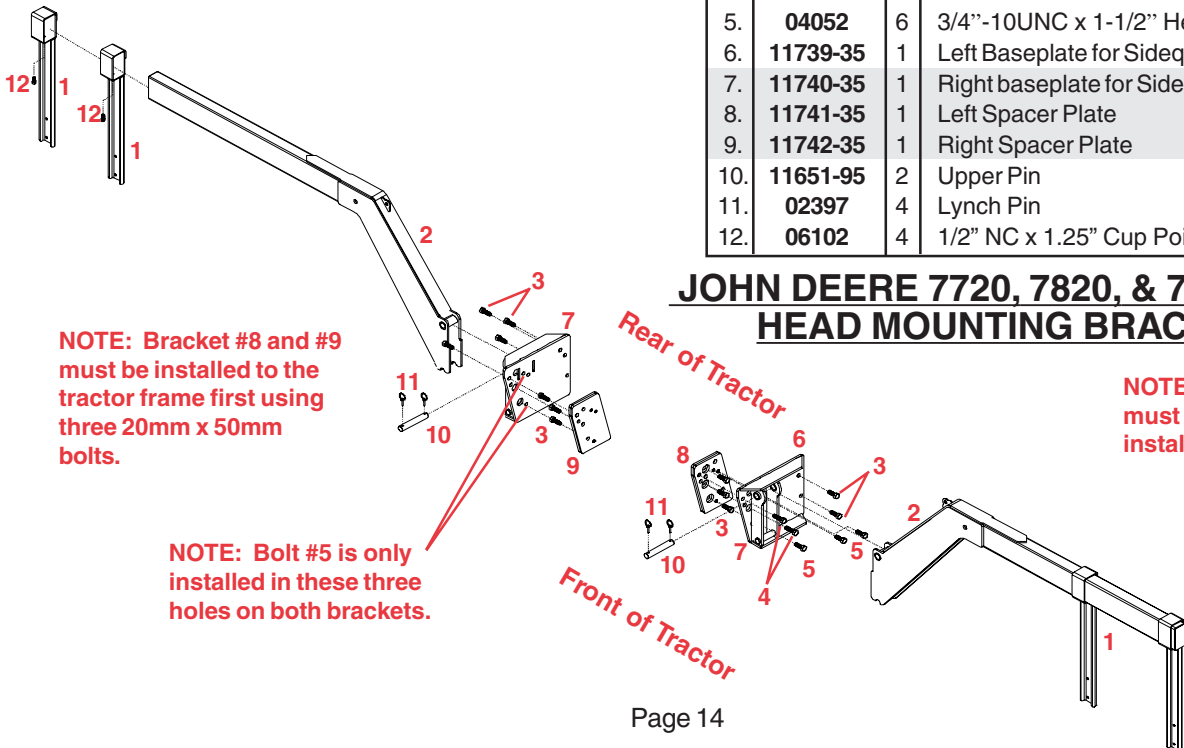
NOTE: Front fenders need to be removed before installation of brackets.

7600-7800 & 7610-7810 Series

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	00482	8	1/2"-13UNC x 1 3/4" Hex Hd Bolt (Gr.5)
2.	00084	8	1/2" Lockwasher
3.	00083	8	1/2"-13UNC Hex Nut
4.	11660-35	1	Left Baseplate for Sidequest
5.	11661-35	1	Right Baseplate for Sidequest
6.	10166-35	1	Spacer Assembly
7.	00254	10	3/4"-10UNC Nut
8.	00253	10	3/4" Lockwasher
9.	01235	10	3/4"-10UNC x 2" Hex Head Bolt (Gr.5)
10.	11442-35	4	Drop Channel
11.	11644-35	2	Extension Arm
12.	11651-95	2	Upper Pin
13.	02397	4	Lynch Pin
14.	06102	4	1/2"NC X 1.25" Cup Point Set Screw

7720, 7820, & 7920 Series

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	11442-35	4	Drop Channels
2.	11644-35	2	Extension Arm
3.	03840	12	20mm x 2.5mm X 50mm Metric Bolt (Gr. 10.9)
4.	11745	4	20mm X 2.5mm x 75mm Metric (Gr. 10.9)
5.	04052	6	3/4"-10UNC x 1-1/2" Hex Bolt (Gr.5)
6.	11739-35	1	Left Baseplate for Sidequest
7.	11740-35	1	Right baseplate for Sidequest
8.	11741-35	1	Left Spacer Plate
9.	11742-35	1	Right Spacer Plate
10.	11651-95	2	Upper Pin
11.	02397	4	Lynch Pin
12.	06102	4	1/2" NC x 1.25" Cup Point Set Screw



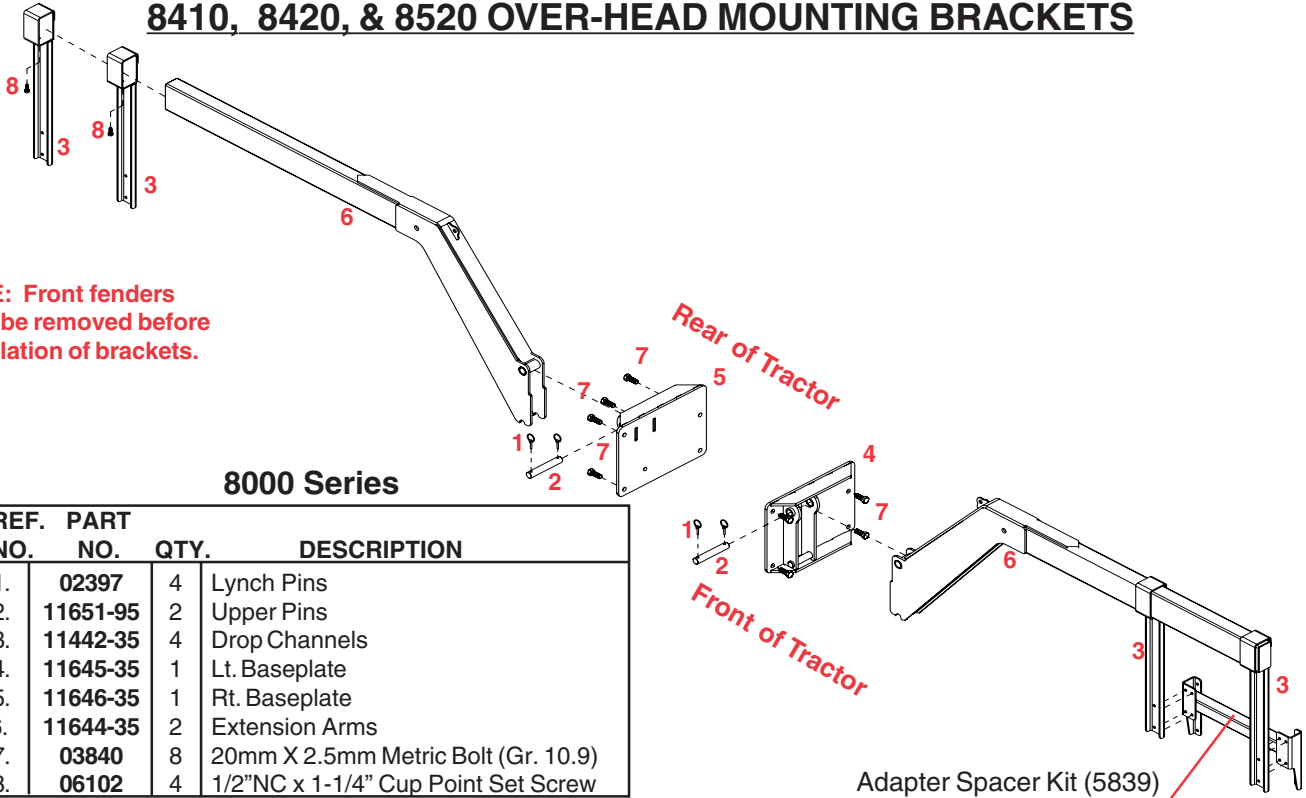
NOTE: Bracket #8 and #9 must be installed to the tractor frame first using three 20mm x 50mm bolts.

NOTE: Bolt #5 is only installed in these three holes on both brackets.

NOTE: Front fenders must be removed before installation of brackets.

JOHN DEERE 7720, 7820, & 7920 OVER-HEAD MOUNTING BRACKETS

JOHN DEERE 8100, 8110, 8120, 8200, 8210, 8220, 8300, 8310, 8320, 8400, 8410, 8420, & 8520 OVER-HEAD MOUNTING BRACKETS



NOTE: Front fenders must be removed before installation of brackets.

8000 Series

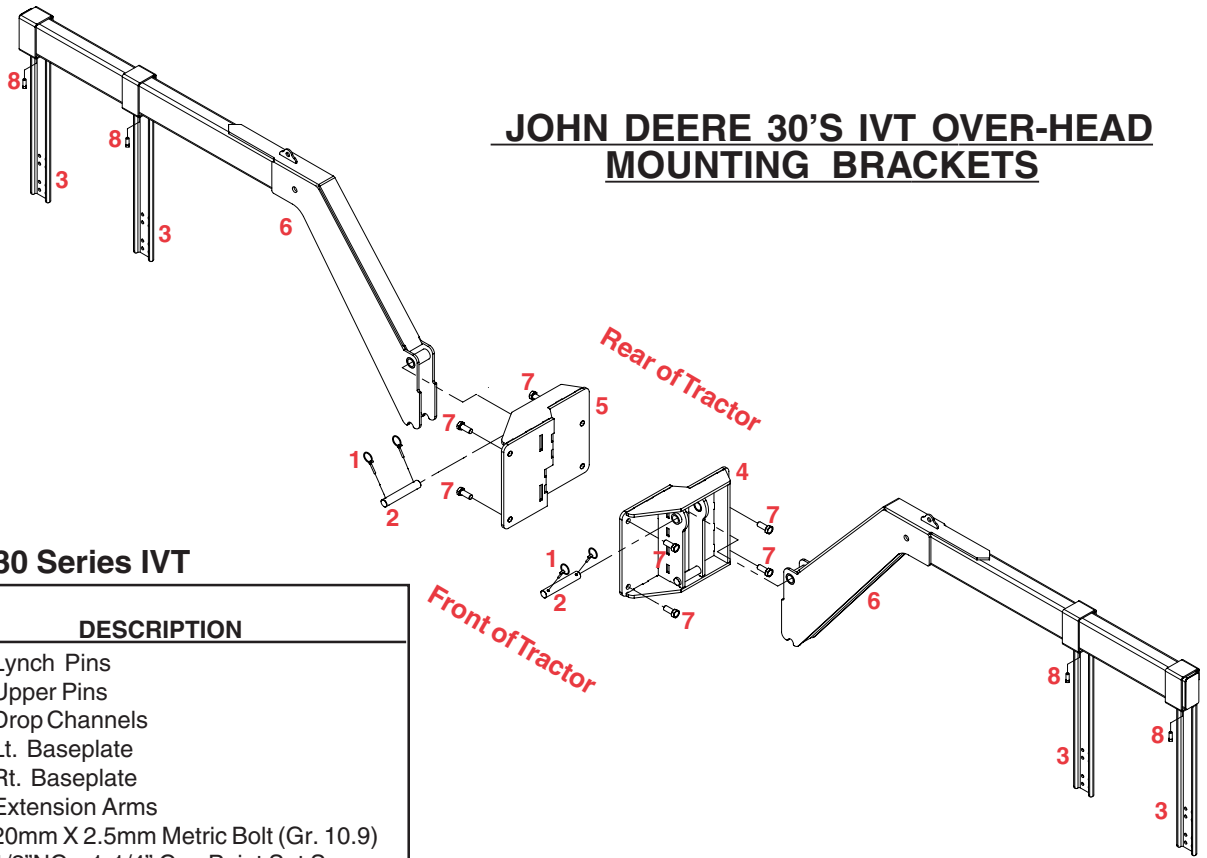
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	02397	4	Lynch Pins
2.	11651-95	2	Upper Pins
3.	11442-35	4	Drop Channels
4.	11645-35	1	Lt. Baseplate
5.	11646-35	1	Rt. Baseplate
6.	11644-35	2	Extension Arms
7.	03840	8	20mm X 2.5mm Metric Bolt (Gr. 10.9)
8.	06102	4	1/2"NC x 1-1/4" Cup Point Set Screw

Please order replacement parts by **PART NO.** and **DESCRIPTION**

Adapter Spacer Kit (5839) is needed for 8420 & 8520 & 30 series with power shift only.

NOTE: Adapter may also be required for tractors with independent link suspension.

JOHN DEERE 30'S IVT OVER-HEAD MOUNTING BRACKETS

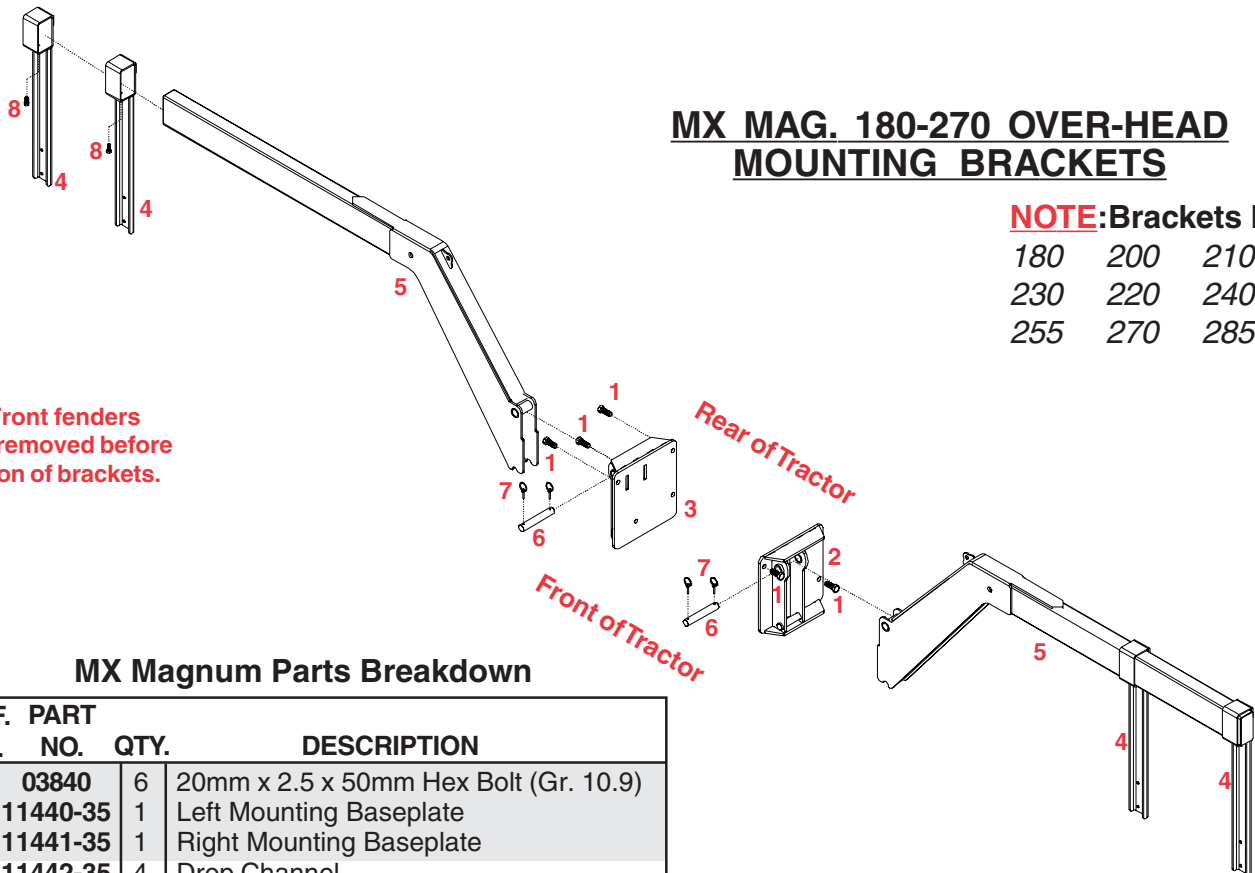


30 Series IVT

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	02397	4	Lynch Pins
2.	11651-95	2	Upper Pins
3.	11442-35	4	Drop Channels
4.	12333-35	1	Lt. Baseplate
5.	12332-35	1	Rt. Baseplate
6.	11644-35	2	Extension Arms
7.	03840	8	20mm X 2.5mm Metric Bolt (Gr. 10.9)
8.	06102	4	1/2"NC x 1-1/4" Cup Point Set Screw

Please order replacement parts by **PART NO.** and **DESCRIPTION**

NOTE: Front fenders must be removed before installation of brackets.



MX MAG. 180-270 OVER-HEAD MOUNTING BRACKETS

NOTE: Brackets Fit

180	200	210
230	220	240
255	270	285

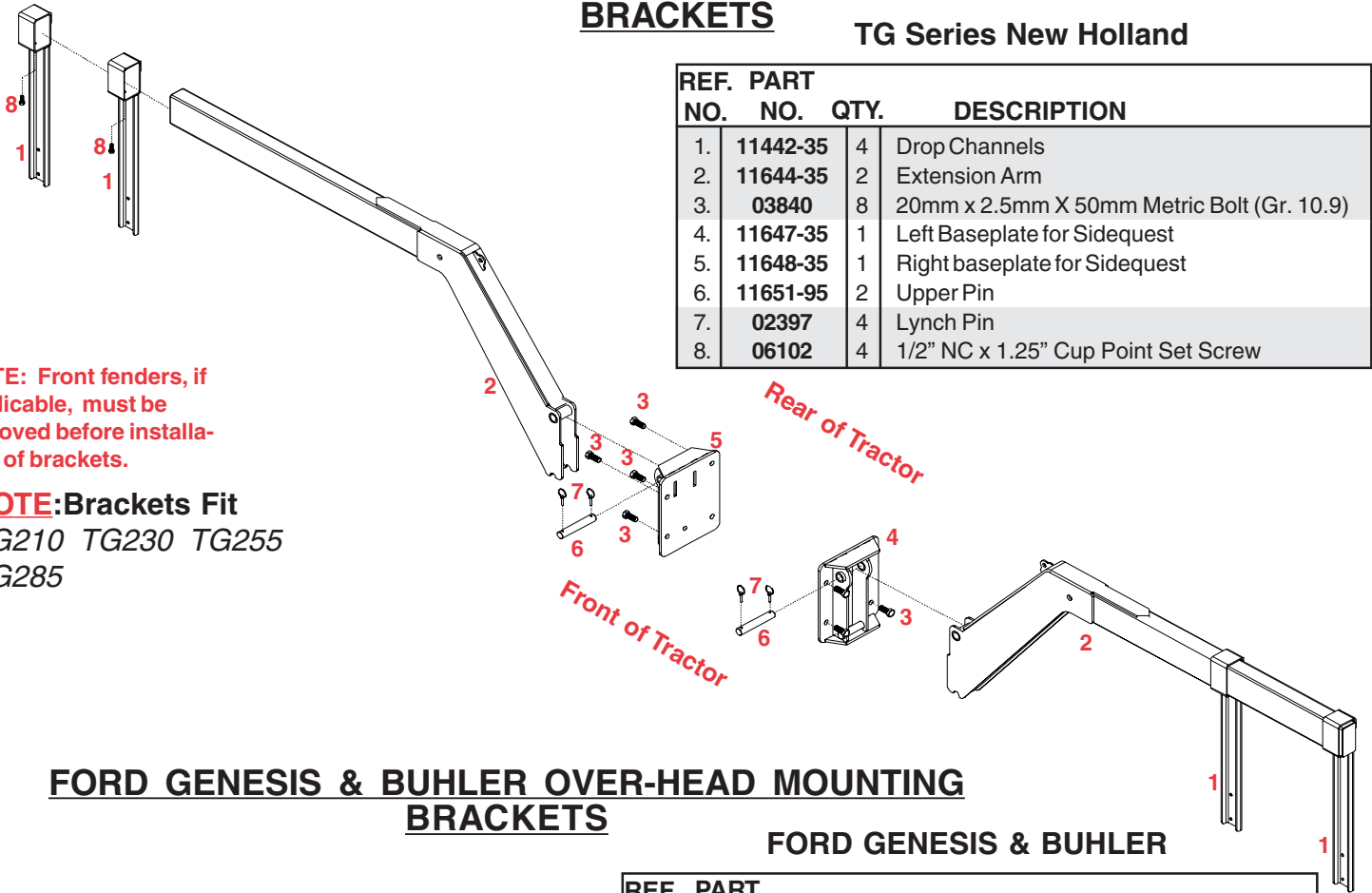
NOTE: Front fenders must be removed before installation of brackets.

MX Magnum Parts Breakdown

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	03840	6	20mm x 2.5 x 50mm Hex Bolt (Gr. 10.9)
2.	11440-35	1	Left Mounting Baseplate
3.	11441-35	1	Right Mounting Baseplate
4.	11442-35	4	Drop Channel
5.	11644-35	2	Extension Arm
6.	11651-95	2	Upper Pin
7.	02397	4	Lynch Pin
8.	06102	4	1/2"NC X 1.25" Cup Point Set Screw

TG SERIES NEW HOLLAND OVER-HEAD MOUNTING BRACKETS

TG Series New Holland



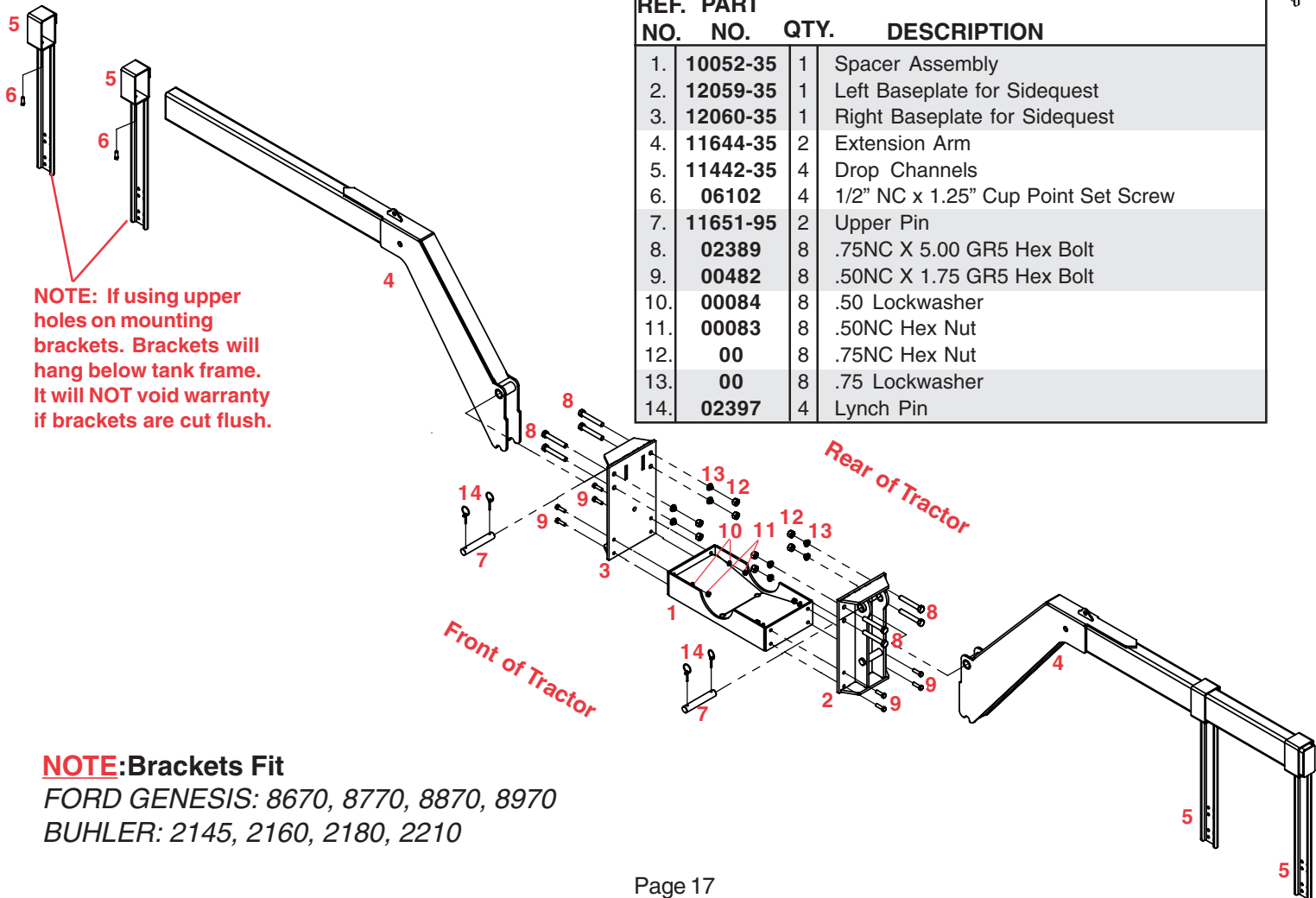
REF. PART NO.	NO.	QTY.	DESCRIPTION
1.	11442-35	4	Drop Channels
2.	11644-35	2	Extension Arm
3.	03840	8	20mm x 2.5mm X 50mm Metric Bolt (Gr. 10.9)
4.	11647-35	1	Left Baseplate for Sidequest
5.	11648-35	1	Right baseplate for Sidequest
6.	11651-95	2	Upper Pin
7.	02397	4	Lynch Pin
8.	06102	4	1/2" NC x 1.25" Cup Point Set Screw

NOTE: Front fenders, if applicable, must be removed before installation of brackets.

NOTE: Brackets Fit
TG210 TG230 TG255
TG285

FORD GENESIS & BUHLER OVER-HEAD MOUNTING BRACKETS

FORD GENESIS & BUHLER



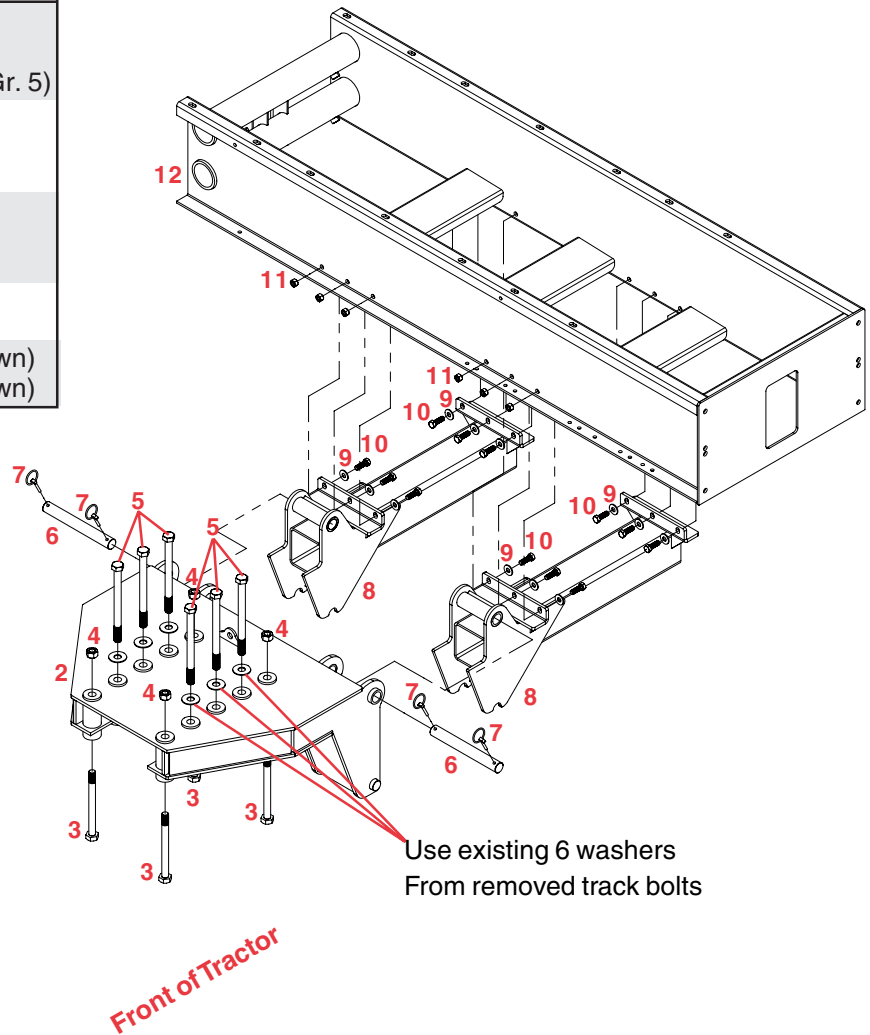
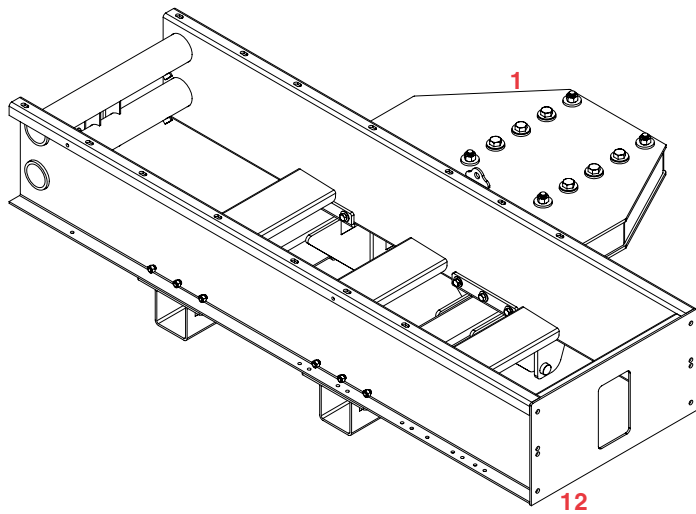
REF. PART NO.	NO.	QTY.	DESCRIPTION
1.	10052-35	1	Spacer Assembly
2.	12059-35	1	Left Baseplate for Sidequest
3.	12060-35	1	Right Baseplate for Sidequest
4.	11644-35	2	Extension Arm
5.	11442-35	4	Drop Channels
6.	06102	4	1/2" NC x 1.25" Cup Point Set Screw
7.	11651-95	2	Upper Pin
8.	02389	8	.75NC X 5.00 GR5 Hex Bolt
9.	00482	8	.50NC X 1.75 GR5 Hex Bolt
10.	00084	8	.50 Lockwasher
11.	00083	8	.50NC Hex Nut
12.	00	8	.75NC Hex Nut
13.	00	8	.75 Lockwasher
14.	02397	4	Lynch Pin

NOTE: If using upper holes on mounting brackets. Brackets will hang below tank frame. It will NOT void warranty if brackets are cut flush.

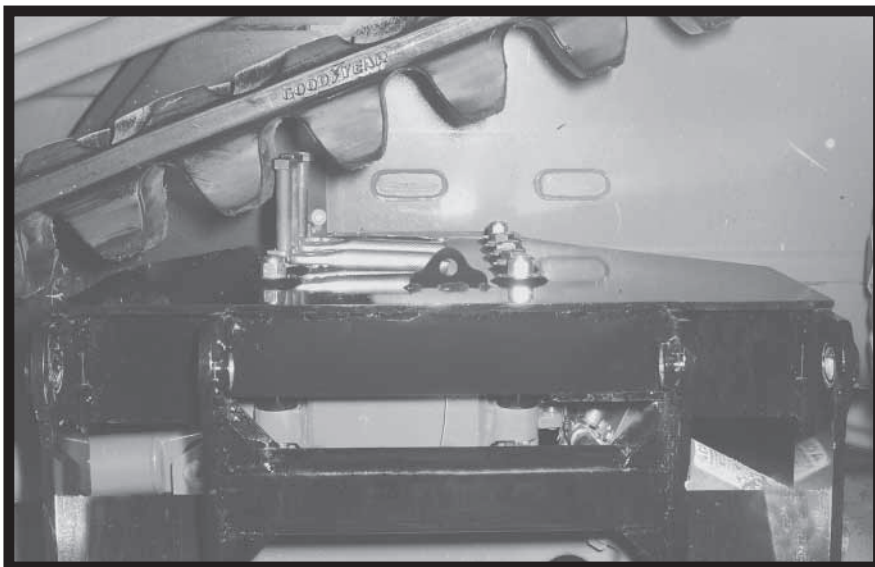
NOTE: Brackets Fit
FORD GENESIS: 8670, 8770, 8870, 8970
BUHLER: 2145, 2160, 2180, 2210

JOHN DEERE 8000 TRACK MOUNTING BRACKETS AND SKID

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	12315-35	1	Right Baseplate for Sidequest
2.	12316-35	1	Left Baseplate for Sidequest
3.	02851	8	3/4"-10UNC x 8.50 Hex Head Bolt (Gr. 5)
4.	02961	8	3/4"-10UNC Nylon Insert Lock Nut
5.	12317	12	20mm-2.5 x 250mm Hex Bolt
6.	12186-95	4	Top Pin 1.25 x 10.25
7.	02397	8	Lynch Pin
8.	12185-35	4	Extension Arm
9.	00085	24	1/2" Flat Washer
10.	01254	24	1/2"NC x 1.50 Hex Head Bolt (Gr. 5)
11.	02178	24	1/2"NC Nylon Insert Lock Nut
12.	35631	2	350gal. Skid Assembly (tank not shown)
-	35632	2	500gal. Skid Assembly (tank not shown)



Use existing 6 washers
From removed track bolts

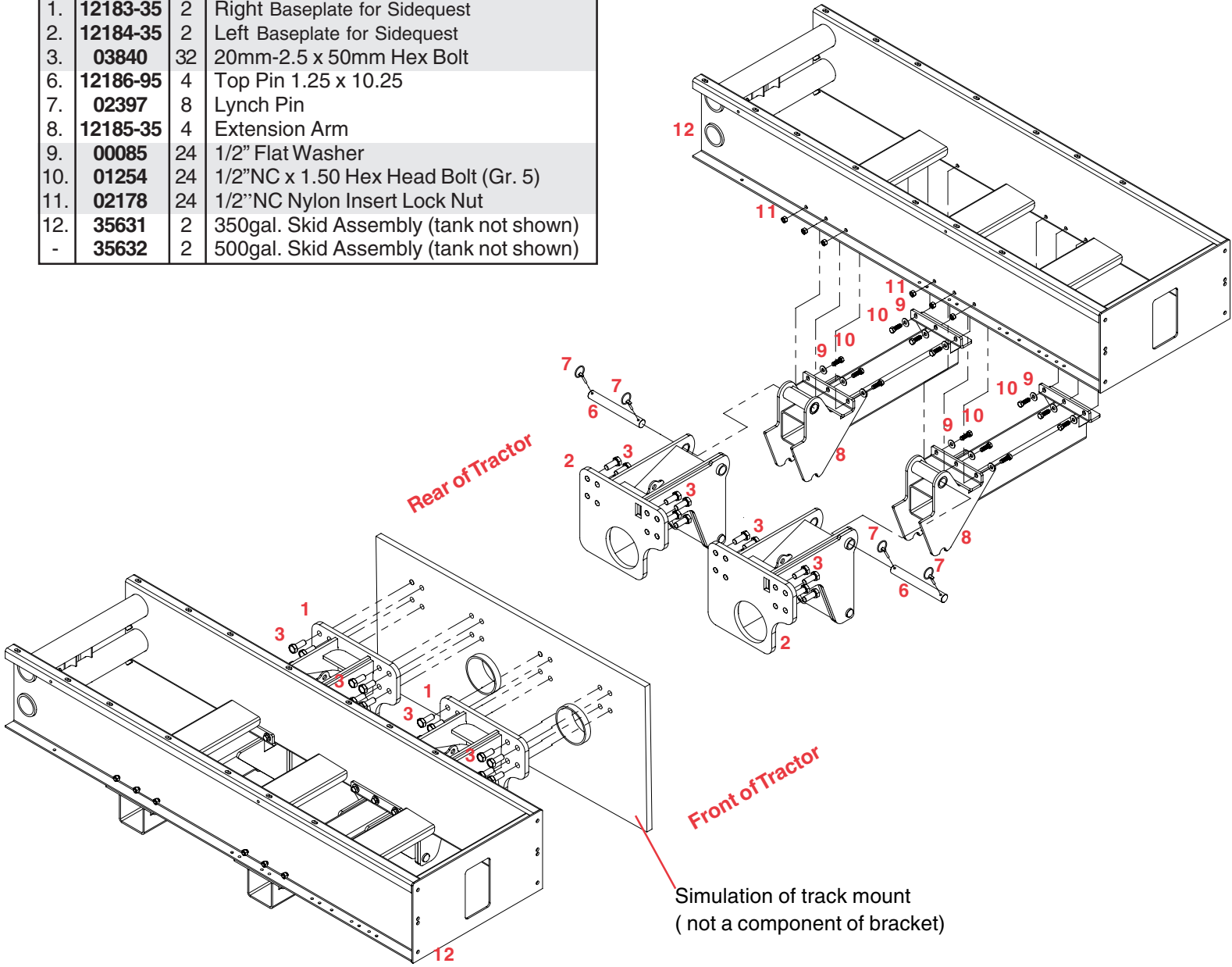


Installation John Deere 8000 Track

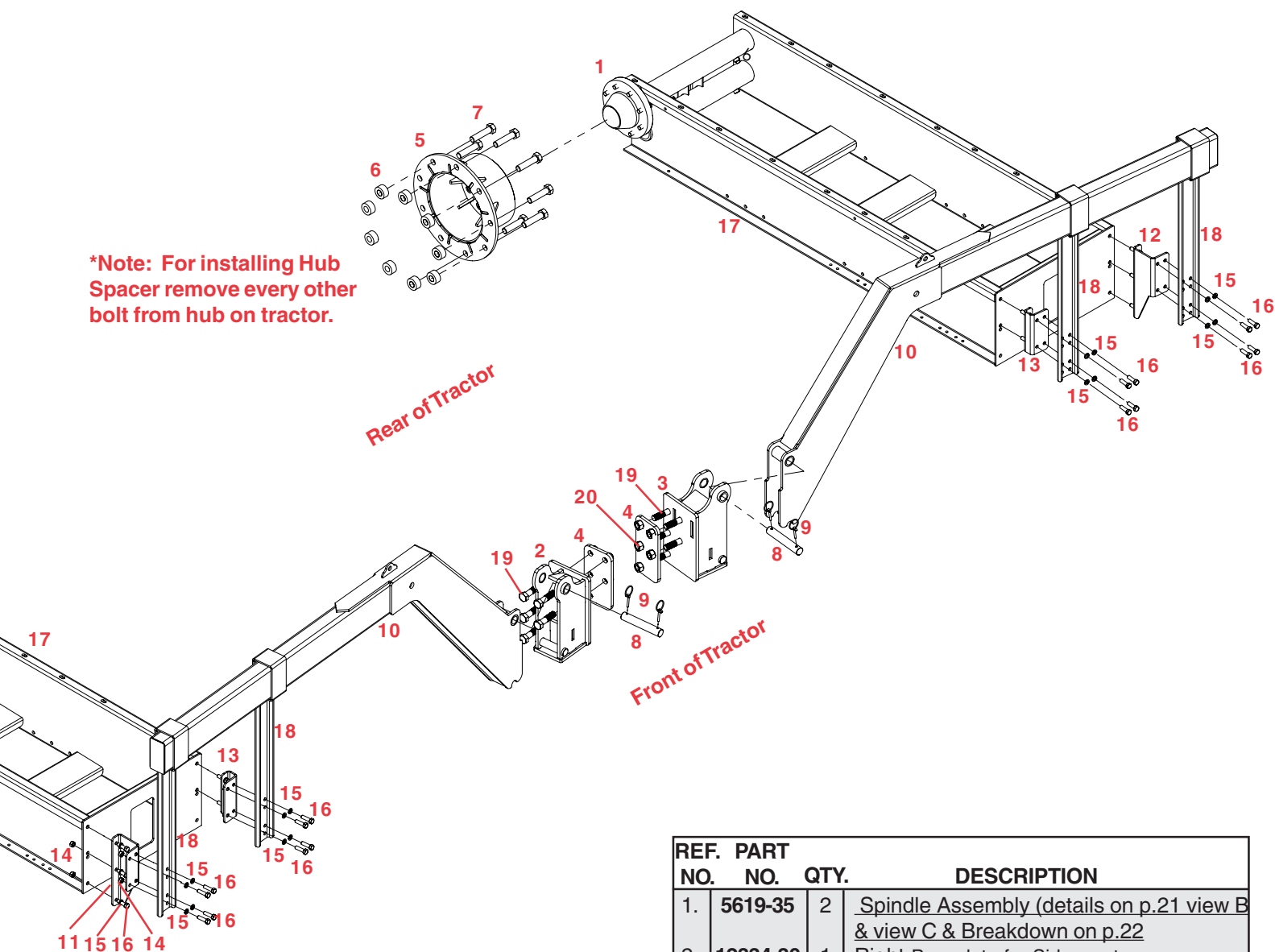
Use any three holes in a row of the five holes depending on the track width. When position is determined remove every other bolt of the six bolts in the track mount, that will match up with the three bolts (#5) in the bracket. Repeat for other side of track mounting. On the row of bolts to the front of the tractor, hold bolts in bracket up to just short of flush of the bottom of bracket, secure in that position with vice grips. Also adjust track so bolts will miss lugs. Then slide in place and tighten all bolts. See diagram.

JOHN DEERE 9000 TRACK MOUNTING BRACKETS AND SKID

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	12183-35	2	Right Baseplate for Sidequest
2.	12184-35	2	Left Baseplate for Sidequest
3.	03840	32	20mm-2.5 x 50mm Hex Bolt
6.	12186-95	4	Top Pin 1.25 x 10.25
7.	02397	8	Lynch Pin
8.	12185-35	4	Extension Arm
9.	00085	24	1/2" Flat Washer
10.	01254	24	1/2"NC x 1.50 Hex Head Bolt (Gr. 5)
11.	02178	24	1/2"NC Nylon Insert Lock Nut
12.	35631	2	350gal. Skid Assembly (tank not shown)
-	35632	2	500gal. Skid Assembly (tank not shown)



CAT MT765 CHALLENGER MOUNTING BRACKETS AND SKID



REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	5619-35	2	Spindle Assembly (details on p.21 view B & view C & Breakdown on p.22
2.	12334-30	1	Right Baseplate for Sidequest
3.	12335-30	1	Left Baseplate for Sidequest
4.	12379-30	2	Back Plate
5.	12378-35	2	Hub Spacer Assembly
6.	12331-95	18	Bushings
7.	12385	18	24mm-3 x 50mm Hex Bolt
8.	11651-95	2	Top Pin 1.25 x 10.25
9.	02397	4	Lynch Pin
10.	11644-35	2	Extension Arm
11.	12382-35	1	Spacer Channel, Right
12.	12383-35	1	Spacer Channel, Left
13.	12384-35	2	Spacer Channel, Center
14.	00083	18	1/2"-UNC Hex Hd. Nut
15.	00084	18	1/2" Lockwasher
16.	00482	18	1/2"-UNC x 1 3/4" Gr.5 Hex Hd. Bolt
17.	35631W	2	350gal Skid Assembly w (tank not shown)
-	35632W	2	500gal Skid Assembly w (tank not shown)
18.	11442-35	4	Drop Channels
19.	09114	10	7/8"-UNC x 3.50" GR.5 Hex Hd. Bolt
20.	10678	10	7/8"-UNC Nylon Lock nut

Please order replacement parts by **PART NO.** and **DESCRIPTION**

Assembly Instructions

Preparation: Remove any loader brackets from the tractor. The tractor's duals must be set to 120" wheel spacing.

1. Remove every other lug bolt on the tractor's dual, and replace them with the special spacer Stud Bolts included with the SideQuest hardware as shown in **VIEW A**. (Note: Only when replacing stud bolts on a JD 7000 Series Tractor, the existing washers **MUST** be used). After all of the removed lug bolts are replaced, remove the rest of the tractor's lug bolts and replace them with the SideQuest stud bolts. Torque the SideQuest stud bolts to tractor manufacturer's specifications.

2. Bolt the Hub Spacer to the SideQuest stud bolts as shown in **VIEW B**. Use ten 7/8"-UNF x 2" hex head bolts and ten 7/8" lockwashers. Then bolt the Hub/Spindle Assembly to the Hub Spacer. Use eight 5/8"-UNF x 2" hex head bolts and lockwashers to bolt the Hub/Spindle Assembly to the Hub Spacer. Torque all bolts to the specifications found earlier in the manual.

3. Mount the Left and Right Base Plates to the tractor's frame. All Base Plates will mount between the tractor's cab and front wheels to existing holes in the tractor's frame. All tractor's mounting brackets can be viewed on pages 14-16.

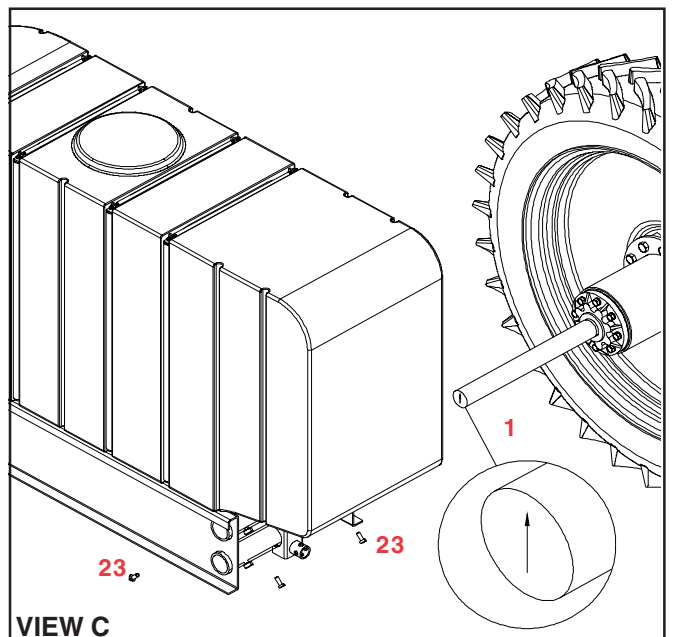
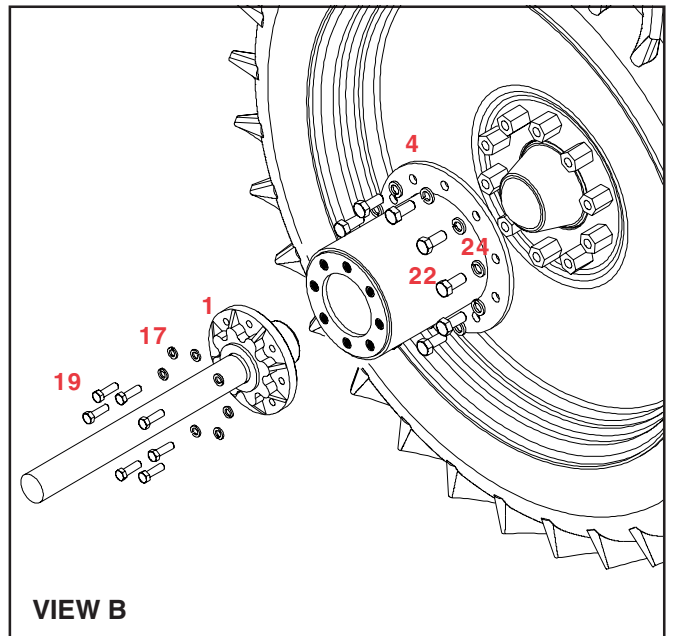
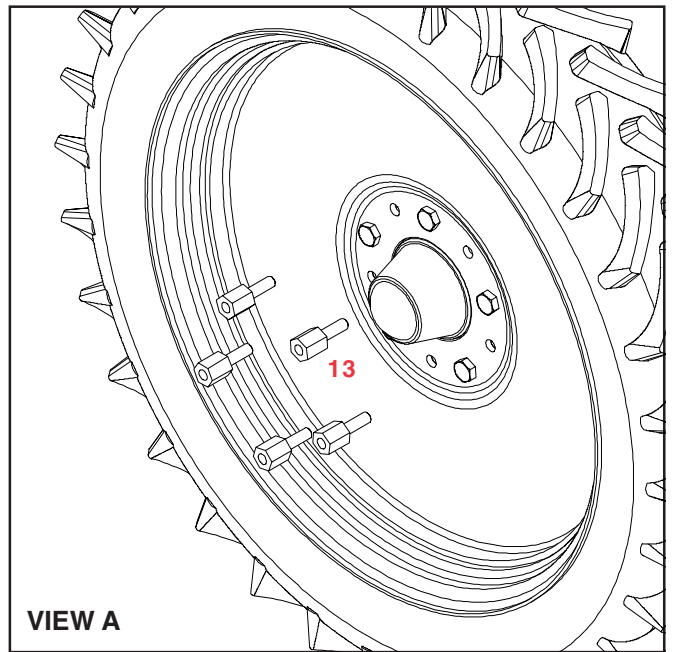
4. Mount the Tank Holder with Tank, and Tank Hold Downs. Before mounting, decide which height setting is desirable. There are two height settings. Slide the Tank holder over the spindle as shown in **VIEW C**. Make sure the arrow on the end of the spindle is always pointing up as shown. Use the bottom hole for a higher height setting, and use the top hole for a lower height setting. Slide the tank holder in until there is a spacing of approximately 2" between the tire and the Tank Holder. Use four 1/2"-UNC x 1 1/4" set screws to hold the spindle in place. Turn the set screws into the threaded inserts on the outside of the tube the spindle has been placed in.

5. Next bolt the Mounting Extension Arm to the Tank Holder. Use four 1/2"-UNC x 1 3/4" hex head bolts, four 1/2" lockwashers, and four 1/2" hex nuts.

6. Repeat same instructions for the opposite side.

NOTE:

View A, B, & C use parts list on next page.



SIDEQUEST PARTS BREAKDOWN

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	5619-35	2	Hub & Spindle Assembly
2.	5502-35	2	Hub Assembly (#608 non-braking)
3.	10155-35	2	Spindle
4.	10066-35	2	Hub Spacer
5.	10214-35	16	Tank Hold Down (350 gal. ONLY)
6.	10215-35	2	Tank Hold Down (500 gal. ONLY)
7.	10924-35	12	Tank Support Tube (500 gal. ONLY)
8.	10923-35	3	Support Crossbar (500 gal. ONLY)
9.	10918-35	2	Top Angle Support (500 gal. ONLY)
10.	11644-35	1	Mounting Extension Arm
11.	11442-35	2	Hanger Bracket
12.	10219-35	2	Tank carrier
13.	10064-90	20	Stud Spacer Bolts John Deere
--.	10248-90	20	Stud Spacer Bolts Ford Genesis
--.	10247-90	20	Stud Spacer Bolts Case IH 71, 72, & 89
--.	10261-90	20	Stud Spacer Bolts Case IH MX Magnum and T G New Holland
14.	10245	8	Cable Assembly
15.	00083	8	1/2"-UNC Hex Hd. Nut
16.	00084	14	1/2" Lockwasher
17.	00248	16	5/8" Lockwasher
18.	00482	8	1/2"-UNC x 1 3/4" Gr.5 Hex Hd. Bolt
19.	00965	16	5/8"-UNF x 2" Gr.5 Hex Hd. Bolt
20.	01254	14	1/2"-UNC x 1 1/2" Gr.5 Hex Hd. Bolt
21.	02592	16	3/8"-UNC Nylon Insert Locknut
22.	10284	20	7/8"-UNF x 2" Gr.5 Hex Hd. Bolt
23.	06102	12	Set Screw 1/2" x 1.25 Cup Point
24.	10360	20	7/8" Lockwasher
25.	01253	6	1/2"-UNC x 2" Gr. 5 Hex Head Bolt
26.	00085	20	1/2" Flatwasher

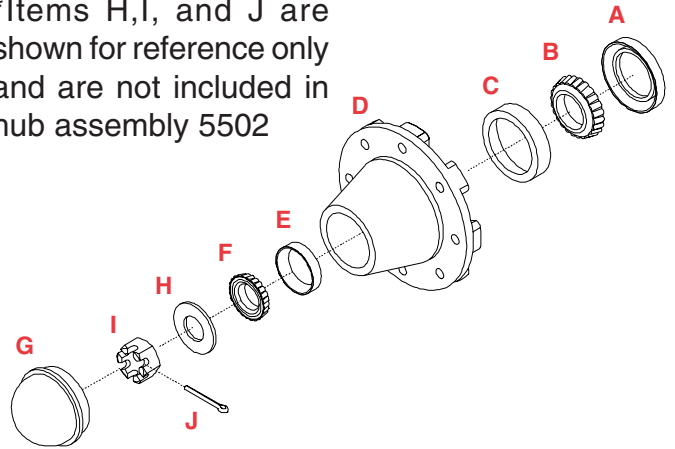
NOTE:

Refer to this parts list for parts shown on pages 17-20.

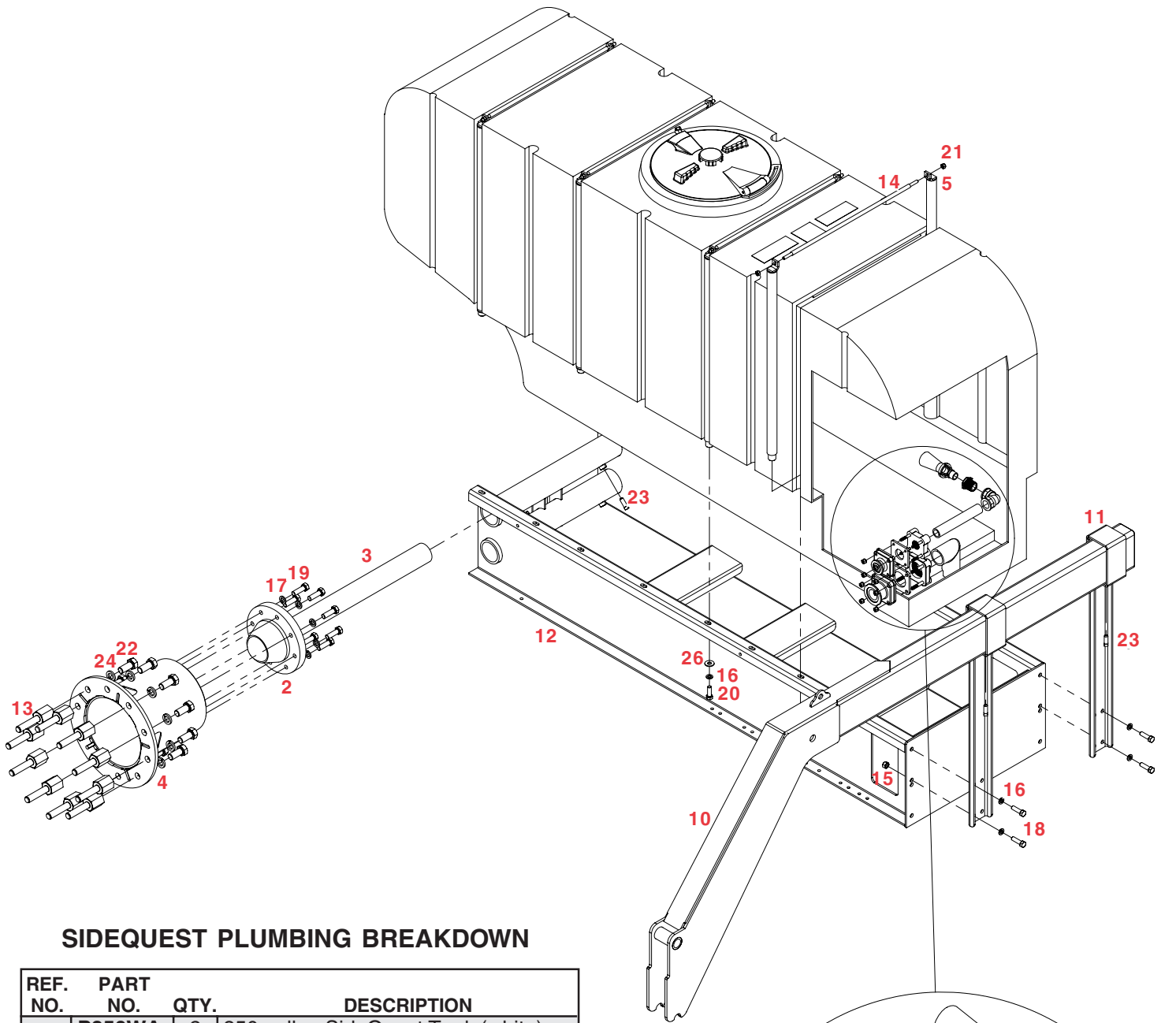
5502 Hub Breakdown

REF. NO.	PART NO.	QTY.	DESCRIPTION
--.	5502	2	Hub Assembly (#608 non-braking)
A.	01944	1	Oil Seal
B.	01942	1	Inner Cone Bearing
C.	01943	1	Inner Cup
D.	09304	1	Hub
E.	01938	1	Outer Cup
F.	01937	1	Outer Cone Bearing
G.	01933	1	Dust Cap
*H.	01936	1	2 1/4" x 1 1/32" Hardened Washer
*I.	01934	1	Castle Nut
*J.	00191	1	3/16" x 1 1/2" Cotter Pin

*Items H, I, and J are shown for reference only and are not included in hub assembly 5502



350 GALLON SIDEQUEST PARTS BREAKDOWN

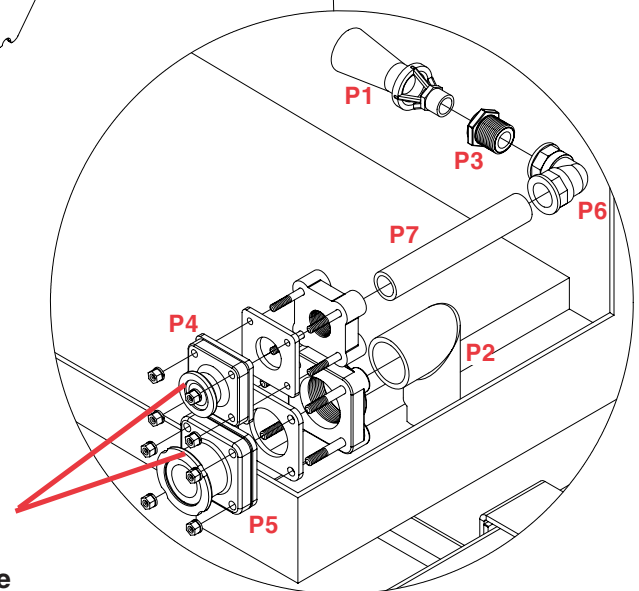


SIDEQUEST PLUMBING BREAKDOWN

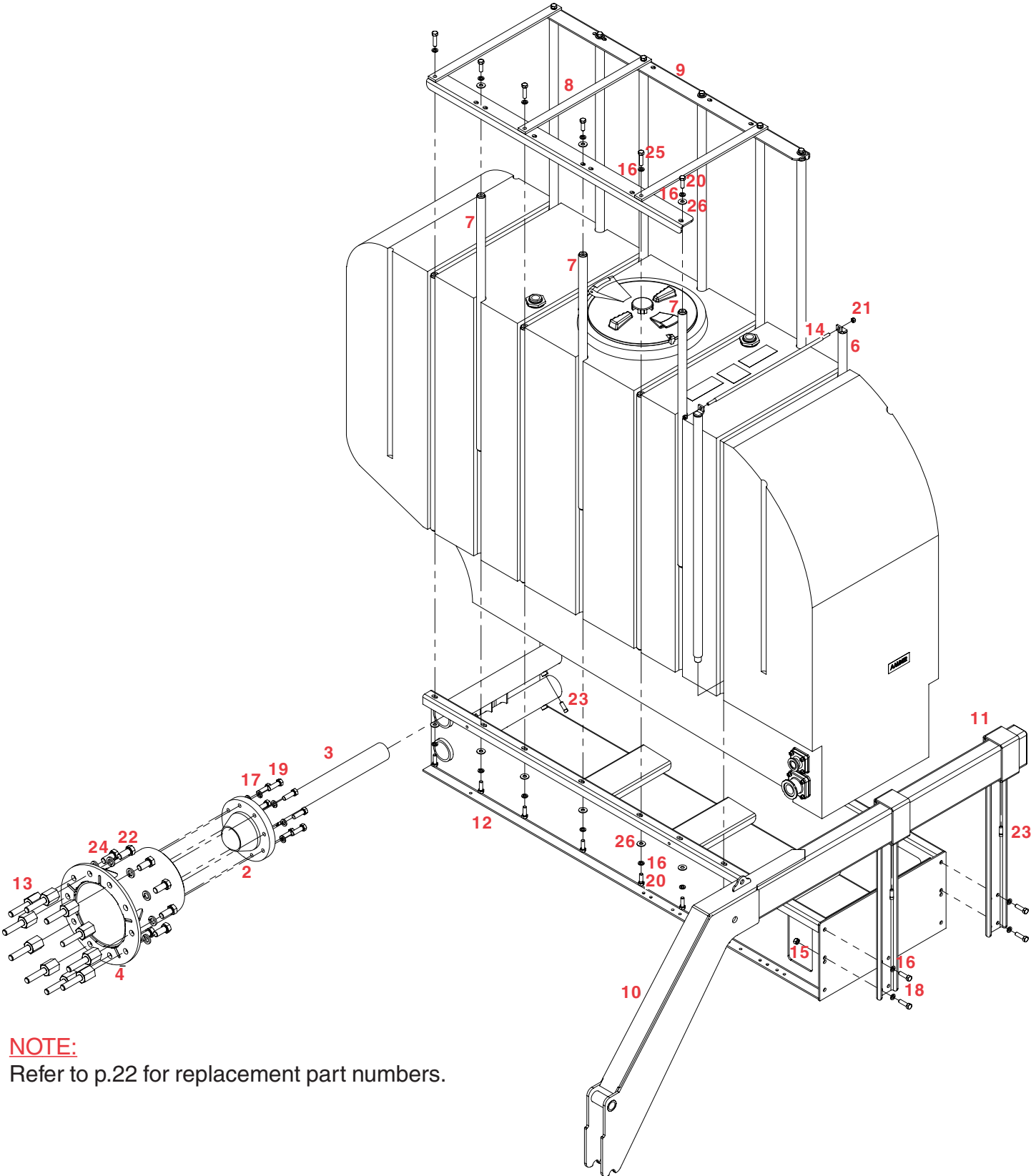
REF. NO.	PART NO.	QTY.	DESCRIPTION
--	P350WA	2	350 gallon SideQuest Tank (white)
--	P350A	2	350 gallon SideQuest Tank (yellow)
--	P500WA	2	500 gallon SideQuest Tank (white)
--	P500A	2	500 gallon SideQuest Tank (yellow)
P1.	09941	1	Agitator Jet
P2.	10267	1	Siphon Tube
P3.	BRB1034	1	1" MPT to 3/4" FPT Reducer Bushing
P4.	FTF100	1	1" Flanged Tank Fitting
P5.	FTF200	1	2" Flanged Tank Fitting
P6.	LL100	1	1" FPT Elbow
P7.	PP180	--	1" Polypropylene Pipe

**When ordering replacement tanks, please specify if the tank you need is either a right or left or center and/or yellow or white.*

NOTE: All units will attach straight fittings here except for the overhead units. Those brackets will use elbows here.

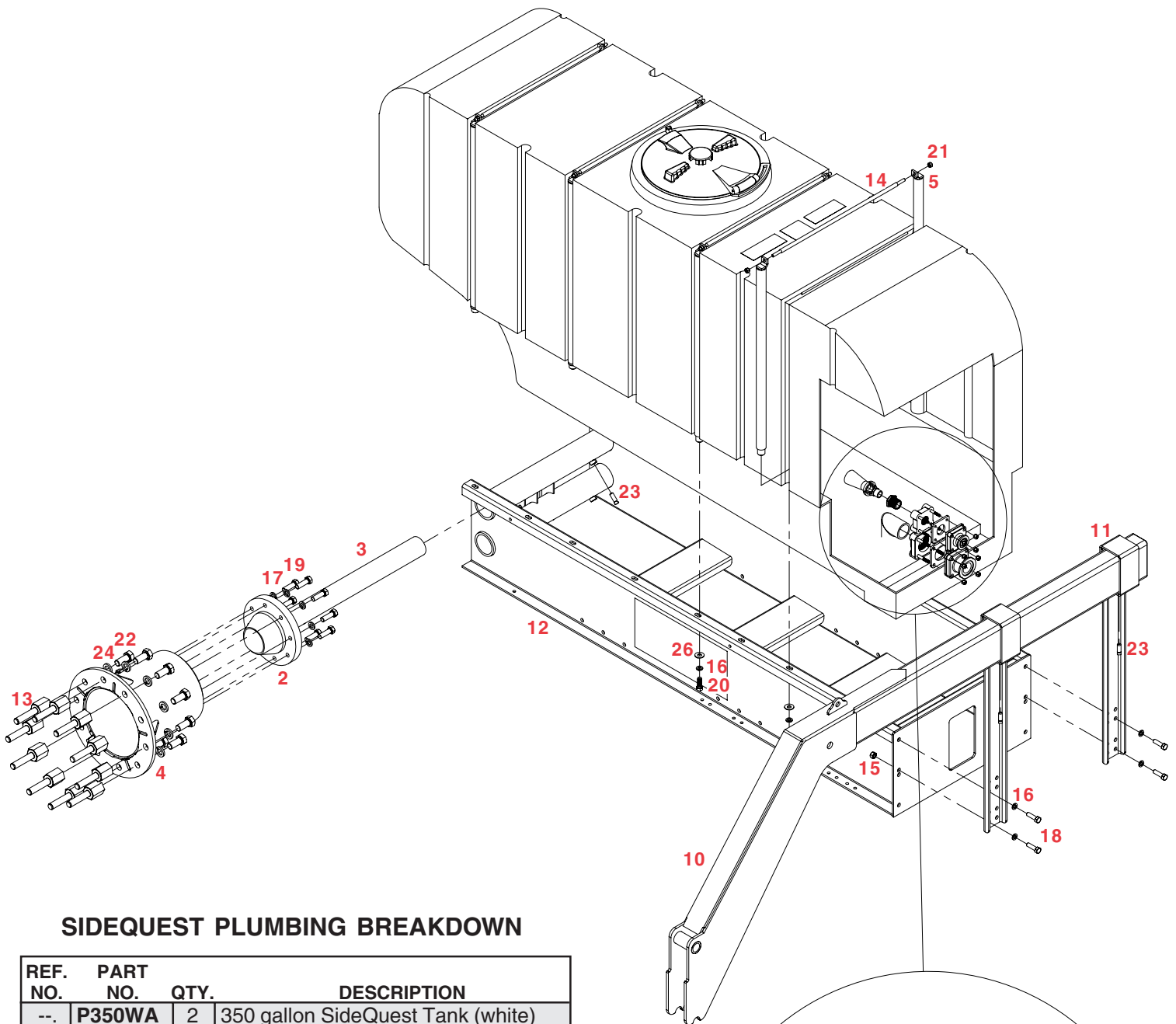


500 GALLON SIDEQUEST PARTS BREAKDOWN



NOTE:
Refer to p.22 for replacement part numbers.

350 GALLON SIDEQUEST CENTER EXIT (35631) PARTS BREAKDOWN



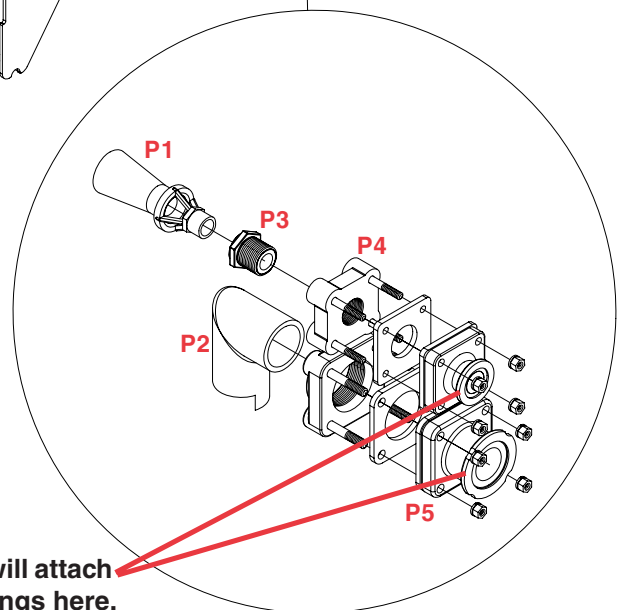
SIDEQUEST PLUMBING BREAKDOWN

REF. NO.	PART NO.	QTY.	DESCRIPTION
--	P350WA	2	350 gallon SideQuest Tank (white)
--	P350A	2	350 gallon SideQuest Tank (yellow)
--	P500WA	2	500 gallon SideQuest Tank (white)
--	P500A	2	500 gallon SideQuest Tank (yellow)
P1.	09941	1	Agitator Jet
P2.	10267	1	Siphon Tube
P3.	BRB1034	1	1" MPT to 3/4" FPT Reducer Bushing
P4.	FTF100	1	1" Flanged Tank Fitting
P5.	FTF200	1	2" Flanged Tank Fitting

* When ordering replacement tanks, please specify if the tank you need is either a right or left or center and/or yellow or white.

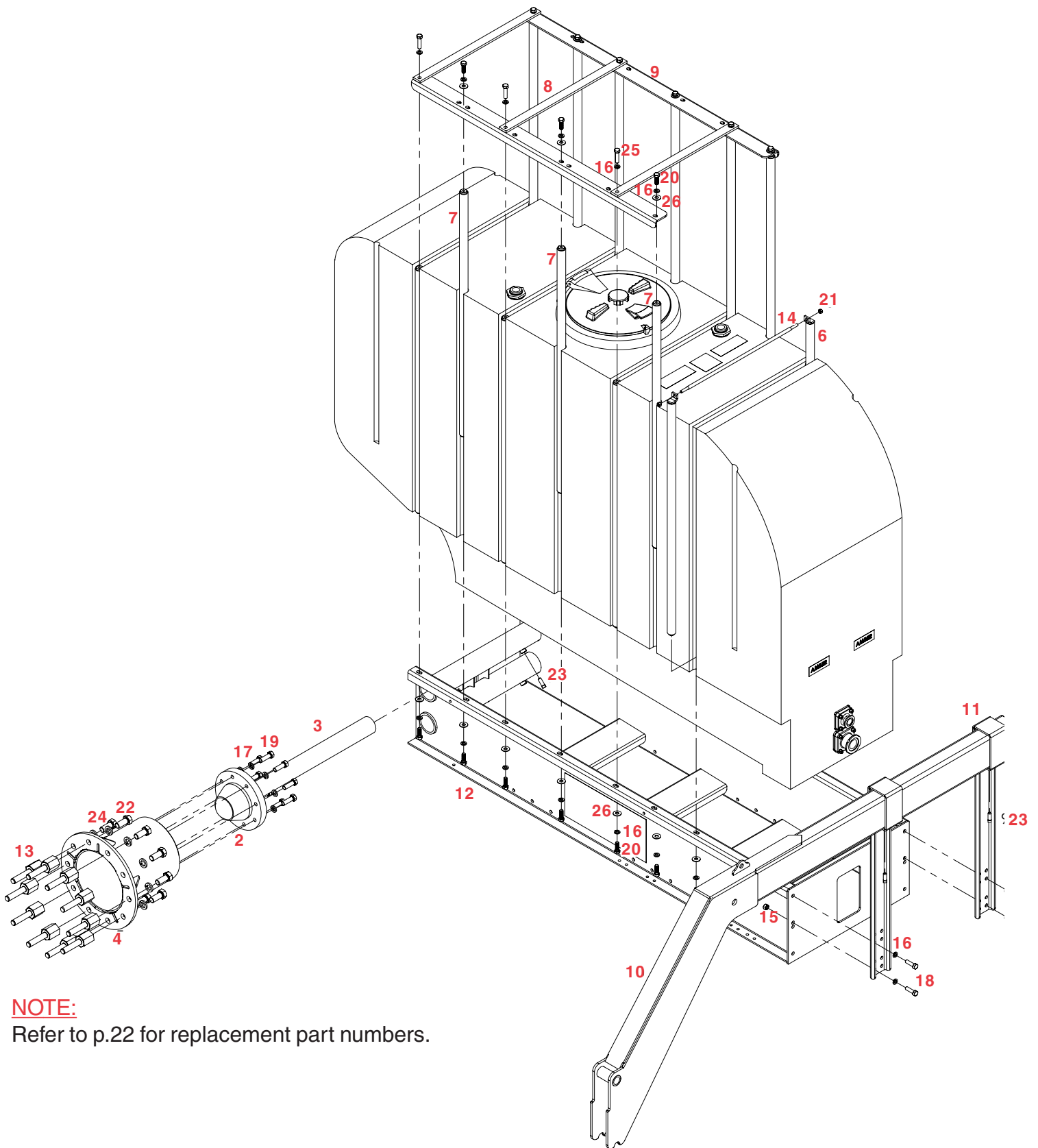
NOTE:

Refer to p.22 for replacement part numbers.



NOTE: All units will attach elbow fittings here.

500 GALLON SIDEQUEST CENTER EXIT PARTS BREAKDOWN



NOTE:

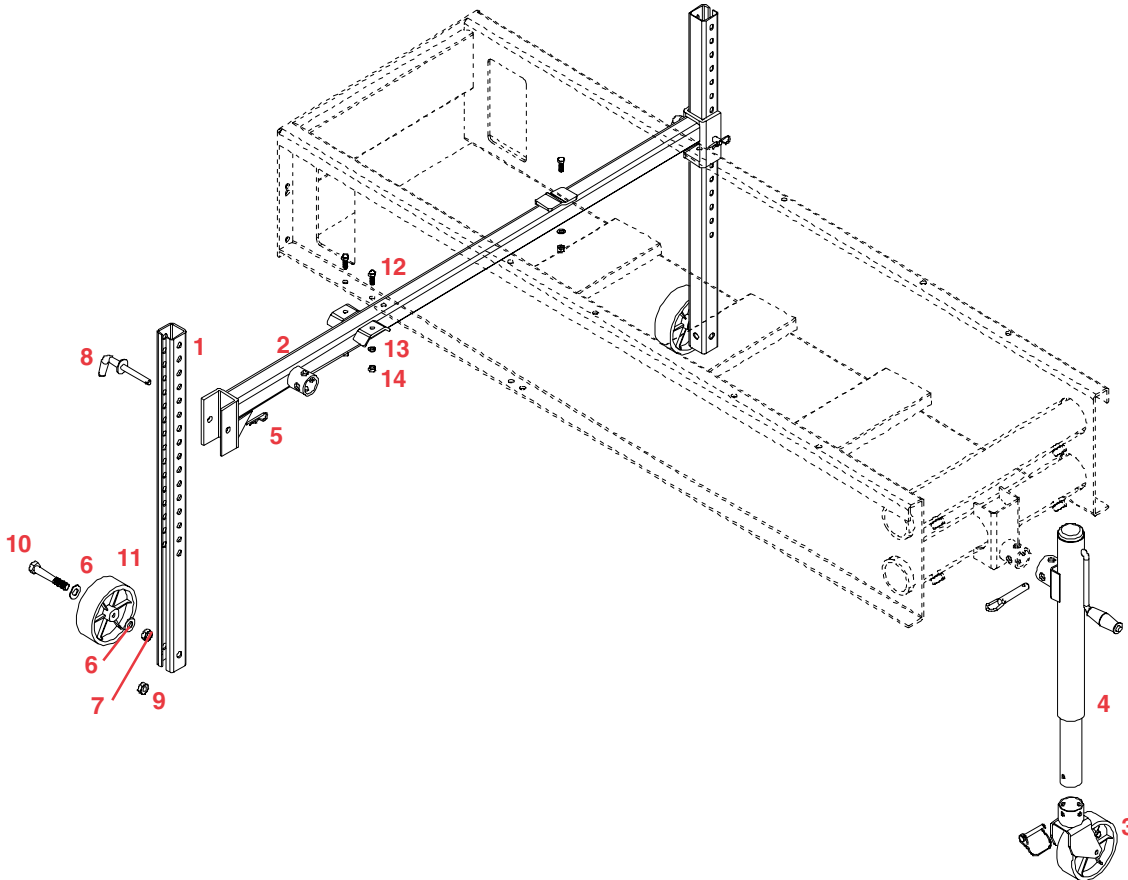
Refer to p.22 for replacement part numbers.

OPTIONAL SIDEQUEST JACKSTANDS BREAKDOWN

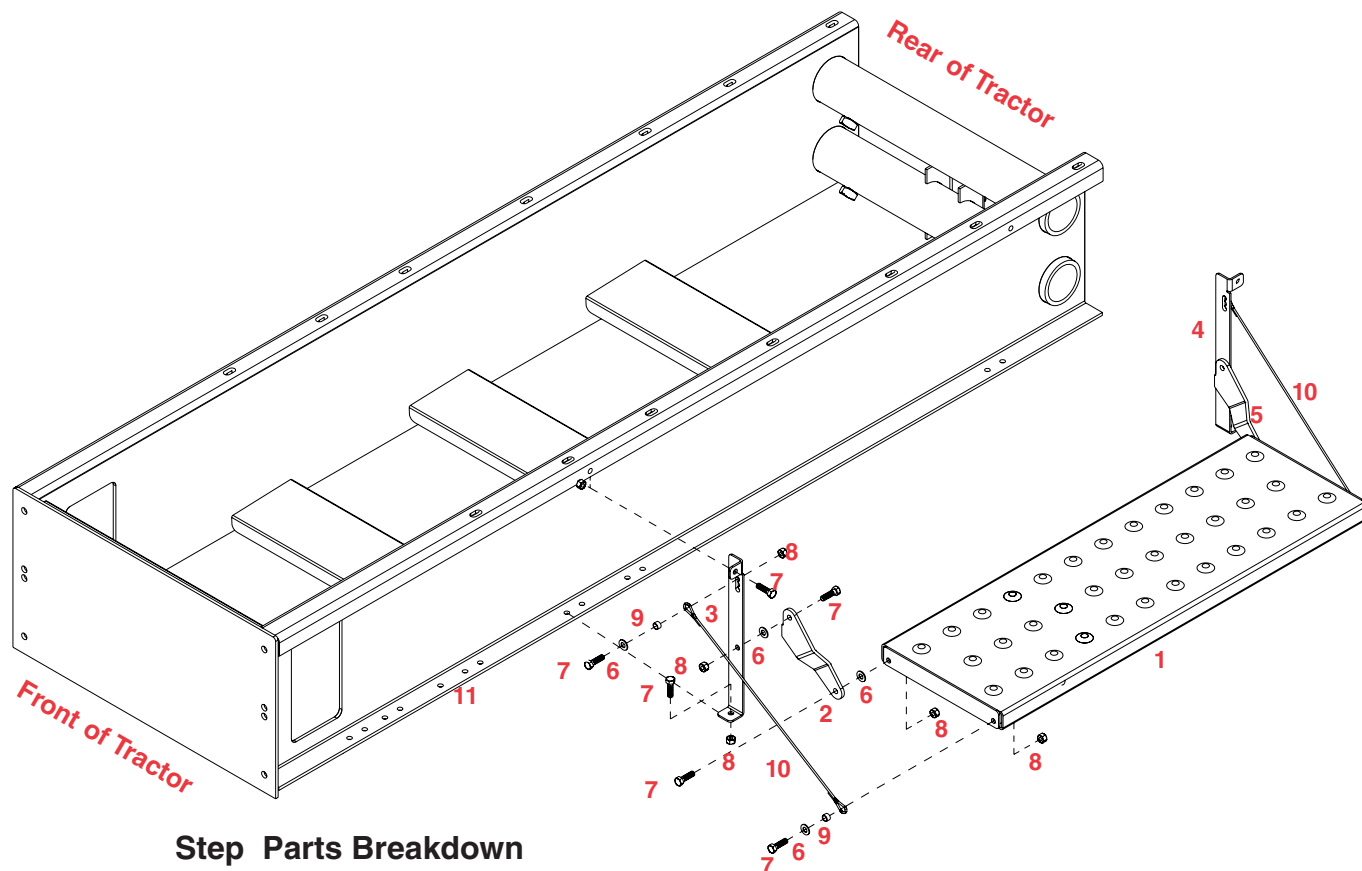
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	07551-35	4	Wheel Stand
2.	10199-35	2	Stand Mounting Bracket
3.	10243	2	Caster Wheel Assembly
4.	10244-35	2	Adjustable Jack Assembly
5.	00182	2	Hair Pin, 7 gauge
6.	00477	8	5/8" Flatwasher
7.	00489	4	5/8"-UNC Jam Nut
8.	01718-95	4	Lock pin
9.	02496	4	5/8"-UNC x 4" Hex Hd Bolt Gr.5
10.	02587	4	5/8"-UNC Nylon Insert Locknut
11.	04445	4	6" x 2" Black Wheel with bushing
12.	00060	6	3/8" Lockwasher
13.	00061	6	3/8"-UNC Hex Hd. Nut
14.	00907	6	3/8"-UNC x 1" Hex Hd. Bolt Gr.5

Notes:

Adjustable jack may be used in two locations. On the outside of the Stand Mount Bracket as well as in the rear of the Tank holder.



SideQuest Parts Breakdown And Assembly for Optional Fold-away External Step



Step Parts Breakdown

REF. PART NO.	PART NO.	QTY.	DESCRIPTION
1.	11446-35	2	External Step
2.	11447-35	2	Left Step Support
3.	11448-35	2	Left Step Mount
4.	11449-35	2	Right Step Mount
5.	11450-35	2	Right Step Support
6.	00059	20	3/8" Flatwasher
7.	00523	16	3/8" x 1-1/4" Hex Head Bolt (Gr. 5)
8.	02592	16	3/8" Nylon Insert Locknut
9.	07919-95	8	Bushing
10.	11451	4	Support Cable
11.	10219-35	1	Tank Carrier (Not Included w/Kit)

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

NOTE: Part quantities are for both sides, but only one side is shown.



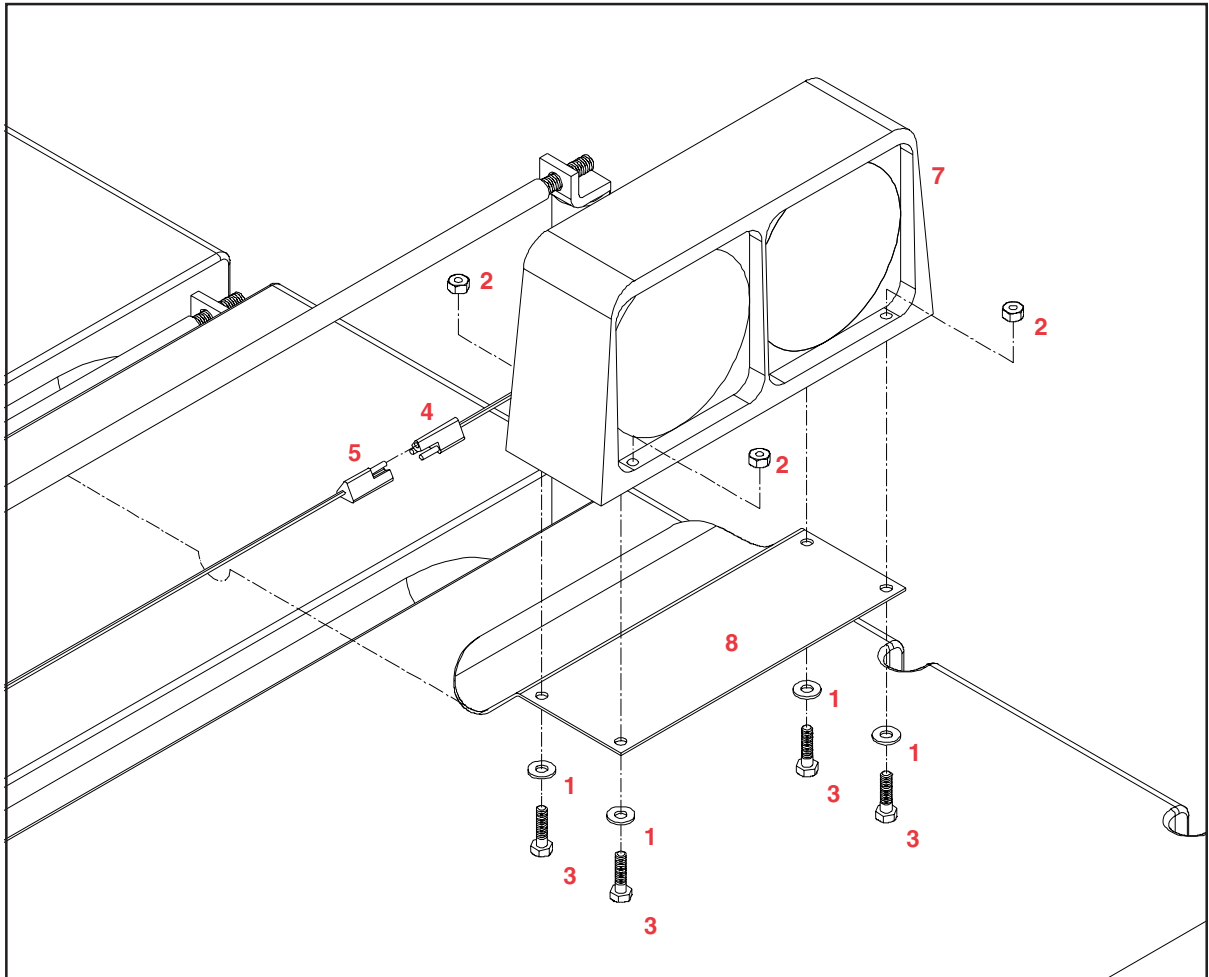
NOTE: TO ADJUST ANGLE OF STEP
ADJUST THE CABLES TOP BOLT
TO ONE OF 3 HOLE POSITIONS.

OPTIONAL SIDEQUEST LIGHT KIT PARTS BREAKDOWN

PARTS LIST

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	00214	8	.25" Flat Washer
2.	02772	8	.25" UNC Nylon Insert Lock Nut
3.	04055	8	.25" x 1.00" UNC Bolt, Grade 5
4.	07416	1	Male Connector Plug
5.	09058	1	Wire Harness (90' X-Fold Clearance Lights)
--.	10032	1	Left Dual Ag Light
7.	10033	1	Right Dual Ag Light
8.	10329-35	1	Light Mounting Bracket

Please order replacement parts by **PART NO.** and **DESCRIPTION**



NOTES:

SPRAYER CHECKLIST:

Downtime caused by field breakdowns is costly and time consuming. Many breakdowns can be eliminated by periodic equipment maintenance. By spending time reviewing this checklist before seasonal spraying application time and following proper after season care, you can save time and money later.



WARNING: To Prevent Serious Injury Or Death

- Keep hands, feet, and loose clothing away from rotating parts.
- Wear protective clothing recommended by your chemical and fertilizer manufacturer when working with chemicals.

Check Before Going To The Field :

- 1. NOZZLES**
Check tip for excessive wear by checking for grooves in or near tip opening. Check nozzle spacing by starting at center and working outwards. Check boom for proper height.
- 2. HOSES**
Check all hoses for worn or soft spots. Be sure all hose clamps are tightened and hoses are not kinked or pinched. Check for leakage in any lines.
- 3. TANK**
Remove and clean agitator orifices. Check orifices for excessive wear by checking for grooves in or near orifice opening. Inspect fitting and grommets to insure they are in good condition.
- 4. CONTROLS**
Check for leakage, plugging, or wear on all valves, fittings, etc. Clean off any build up of foreign material.
- 5. PUMP**
Check to be sure pump turns freely.
- 6. FRAME**
Be sure all bolts are tightened.
- 7. REPLACEMENT PARTS**
Replace all worn or damaged parts.

After Season Care:

NOTE: It is important to wear proper safety equipment when cleaning the SIDEQUEST . See your chemical or fertilizer package for this information.

1. After spraying chemicals, run water mixed with cleaners through tank, pump and all hose hookups. If wettable powder dries out in the system, it is very difficult to put back into suspension and can cause malfunction, damage or injury.
2. When cleaned, tank should have all openings closed or covered to keep dirt from entering.
3. Pump should be flushed with soluble oil and pump ports plugged to keep out moisture and air.
4. Disassemble tips and rinse with water or cleaning solution. (Appropriate for chemical sprayed).
5. Clean tip opening with a wooden toothpick. Never use wire or hard object that could distort opening.
6. Dispose of all unused chemicals or solutions in a proper and ecologically sound manner.
6. Water rinse and dry tips before storing.

NOTE: DETHMERS MANUFACTURING COMPANY does not and will not make any recommendations concerning application of various chemicals or solutions. These recommendations relate to either amount or procedure of materials applied. If you have any questions regarding application of certain chemicals or solutions, contact your chemical supplier and follow chemical manufacturer recommendations.



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