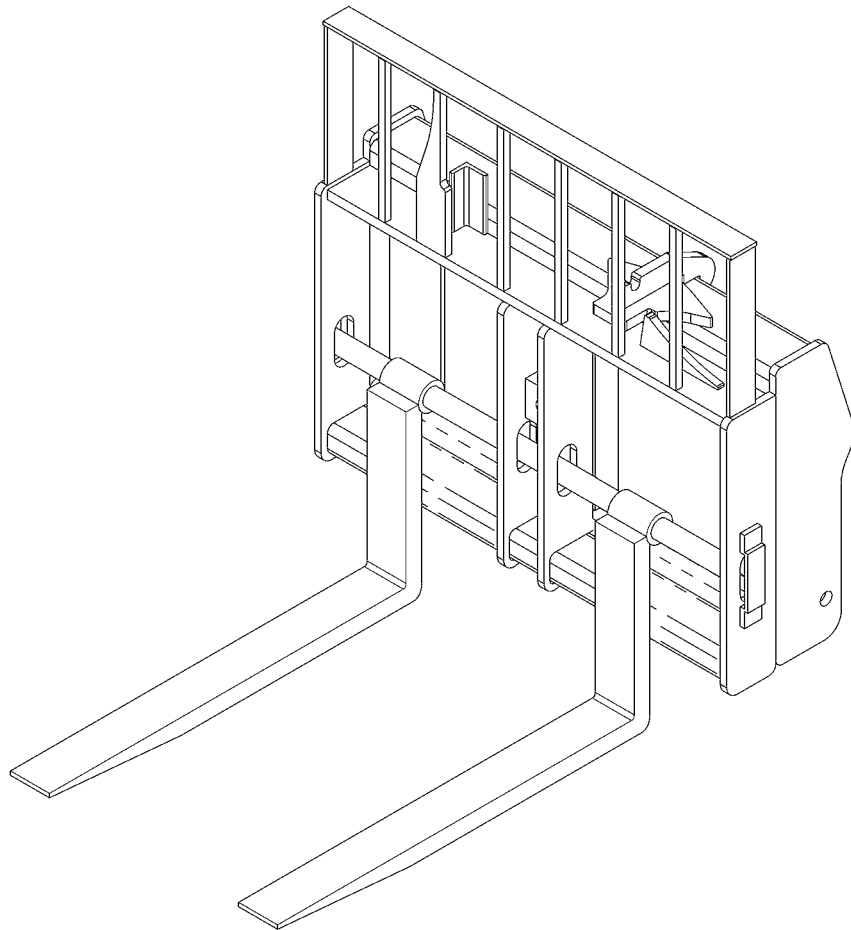


OPERATOR'S & PART'S MANUAL

FORK CARRIAGE MANUAL 3200/3220/3400/3420/3800 Telehandler



M-272
6-27-08
Rev. 6



SMP76156

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GENERAL INFORMATION

Congratulations on the purchase of your new attachment. Your attachment was carefully designed and manufactured to give you many years of dependable service. Be sure to observe all safety precautions in this manual in the equipment operator's manual. Check load charts before operating.

ABOUT THIS MANUAL

Read this manual before using your attachment. This manual has been designed to help you do a better and safer job. Remember, never let anyone operate this equipment without them having read and completely understand the "Safety Precautions" and "Operating Instructions" in the equipment manuals, or having them be fully trained by an experienced, qualified person who has read and completely understands the "Safety Precautions" and Operating Instructions".

SERVICE

When servicing your attachment remember to use only original manufacturer replacement parts. Substitute parts may not meet the standards required for safe, dependable operation.

To facilitate parts ordering, record the model and serial number of your attachment in the space provided on this page. This information may be obtained from the identification plate located on the left side of the frame.

MODEL: _____

SERIAL NO. _____

Your parts department needs this information to insure that you receive the correct parts or attachments for your specific attachment.

SAFETY PRECAUTIONS



TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY OR 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 the use of signal words DANGER, WARNING, and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

- DANGER:** Indicates an imminently hazardous situation which, if not avoided, **will** result death or serious injury.
- WARNING:** Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury, and includes hazards that are exposed when guards are removed.
- CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may result in minor or moderate injury. It may also be used to alert against unsafe practices.**

A careful operator is the best operator. Most accidents can be avoided by taking certain precautions. Read and understand these safety precautions before operating the vehicle. Make sure that the equipment is operated only by responsible individuals with the proper instruction. The operator should be familiar with the controls, all safety precautions and all potential hazards.

THE VEHICLE

1. **READ ALL OPERATOR'S & SAFETY MANUALS BEFORE EVER ATTEMPTING TO USE THE VEHICLE.**
2. **FOLLOW ALL SAFETY DECALS** on the vehicle. Keep them clean and replace them if they become worn and hard to read.
3. **PAY ATTENTION TO THE JOB AT HAND.** Do not let your mind lose concentration on what you are doing.
4. **KNOW THE LIMITATIONS OF YOUR EQUIPMENT.** Do not use equipment for anything other than what it was originally designed.
5. **ALWAYS USE THE SEAT BELT IF THE VEHICLE HAS A ROPS. DO NOT USE IT IF THERE IS NOT ROPS.** Check the seat belt daily and replace if frayed or damaged.

OPERATION

1. **NEVER USE YOUR ATTACHMENT FOR A WORK PLATFORM OR PERSONNEL CARRIER.**
2. **SPECIFIED LIFT CAPACITIES MUST NOT BE EXCEEDED, OTHERWISE MACHINE STABILITY IS NOT SUFFICIENT. DANGER OF ACCIDENTS.** Always observe lift capacity limits listed in machine specifications or written on load charts furnished with the handler. A copy of the load charts are included in this manual for reference only. If you have not received these load charts please order them from your John Deere Dealer.
For 3200 series handler use part number Z75401 OR TEMPLDCT011 load chart.
For 3220 series handler use part number Z81494 OR Z81500 load chart.
For 3400 series handler use part number Z75402 OR TEMPLDCT006 load chart.
For 3420 series handler use part number Z81510 OR Z81517 load chart.
For 3800 series handler use part number Z78616 OR TEMPLDCT001 load chart.
3. **ALWAYS CHECK LOCKING PINS BEFORE OPERATING ANY ATTACHMENT.**
4. **NEVER LIFT, MOVE OR SWING LOADED FORKS OVER ANYONE.**
5. **DON'T OBSTRUCT YOUR VISION WHEN TRAVELING OR WORKING.** Carry the forks LOW for maximum stability and visibility.
6. **ALWAYS SPACE THE FORKS CORRECTLY FOR THE LOAD.** Loads can fall off incorrectly spaced forks. Make sure the forks are completely under the load before lifting.
7. **AVOID STEEP SLOPES OR UNSTABLE SURFACES.** When operating on a slope keep the load low and proceed with extreme caution. Do not drive ACROSS a steep slope, drive straight up and down. With a LOADED forks - face the load uphill. With EMPTY forks - face downhill.
8. **NEVER STACK LOADS ON UNEVEN GROUND.** Loads stacked on uneven ground can topple.
9. **ELECTROCUTION CAN RESULT FROM CONTACTING OR APPROACHING UNDERGROUND OR OVER-HEAD POWER CABLES.** Check overhead clearances: know your margin of safety. If possible, have power to the lines disconnected. If not possible, request a signal person for guidance.
10. **NEVER LIFT A LOAD WITH ONE FORK.** A load lifted with one fork can slip off and cause injury.
11. **SECURE LOADS PROPERLY.** Unsecured loads can fall unexpectedly.
12. **DO NOT HANDLE ROUND BALES WITH FORK LIFT TINES.**

ATTACHING EQUIPMENT

1. Ensure locking pins are fully retracted. If necessary, pull on diverter valve knob and press switch on Multi-function lever to retract locking pins.
2. Extend the boom approximately 1m (3 feet), tilt the carrier slightly forward and drive up to the attachment. See Figure #1
3. Drive the machine forward, until the pick-up cones pass under the rings on the attachment and then lift the boom until the attachment is clear of the ground. See Figure #2
4. Tilt the carrier backwards and engage the locking pins by operating the switch. See Figure #3

FIGURE #1

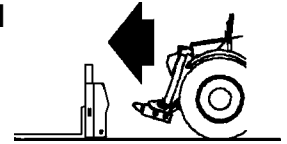


FIGURE #2

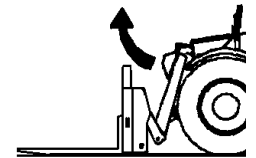
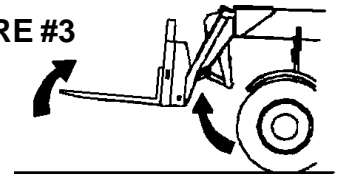


FIGURE #3



CAUTION! ALWAYS CHECK LOCKING PINS BEFORE TILTING OR OPERATING ANY ATTACHMENT.



5. Raise and tilt back the attachment to the travelling position. Move the boom lockout switch to the cylinder lock position to lock the pins in place.
6. Lower boom to its lowest position, shut off engine, and connect hydraulic hoses to handler by following the auxiliary hydraulic hook up instructions in your handlers operator's manual.

Installation is now complete.

DETACHING EQUIPMENT

1. Unlock the locking pins by turning the boom lockout switch to the unlock position.
2. Disengaging the pins by operating the locking pin retract switch.
3. Position the attachment on the ground and tilt the carrier forward and lower the boom until the pick-up cones clear the rings on the back of the attachment.
4. Ensure the locking pins are fully retracted. If necessary, pull on diverter valve knob and press the switch on Multi-function lever to retract locking pins.
5. Shut off the engine, and disconnect hydraulic hoses to handler by following the instructions in your handlers operator's manual.
6. Drive the machine in reverse until it is clear of the attachment.

OPERATING EQUIPMENT

Read all Safety Precautions before operating your new attachment. If you have not been supplied with a load chart for your attachment, order one from you John Deere dealer and place inside the operating machine for safe lift capacity limits.

Refer to your machines operator's manual for attachment operation.

SIDE TILT FORK CARRIAGE: When using the tilt feature keep the load as level as possible, using extreme caution when driving off of a slope to reposition the forks to prevent the load from sliding off of the forks or pallet. **NOTE:** If carriage tilts or drifts due to oil leakage within the cylinder assembly, discontinue use until the problem has been corrected.

SIDE SHIFT FORK CARRIAGE: When using the shift feature to pick up a load be sure to return the forks and load to the center position as soon as possible. Do NOT travel with loaded forks shifted to the side.

GENERAL INFORMATION

Your attachment was designed to be virtually maintenance free. Very little effort is needed to keep it in top condition. It is however, important to follow these procedures to get full performance and longevity out of the attachment.

LUBRICATION

The only lubrication your attachment may need is the greasing of the cylinder ends. A grease fitting has been installed to facilitate this task. Following is a list of each of the attachments in this manual and the number of grease fittings.

MJ4058 = 0

MJ4084 = 2 (One fitting on each end of the cylinder.)

MJ4085 = 2 (One fitting on each end of the cylinder.)

QC1072 = 0

EVERY 40 HOURS OF OPERATION

We recommend greasing all grease fittings after the initial 8 hours of operation and then every 40 hours of operation thereafter.

MONTHLY

Once a month your attachment should be inspected for loose nuts, capscrews, bearings etc. Tighten as required and replace where necessary.

Clean equipment of all dirt, oil, grease, etc. This will assist you in making visual inspections and help avoid overlooking worn or damaged components.

Keep all safety decals clean and legible. Replace if damaged or worn.

Inspect all hydraulic hoses for deterioration and replace if necessary.

CYLINDER SEAL REPLACEMENT

GENERAL INFORMATION

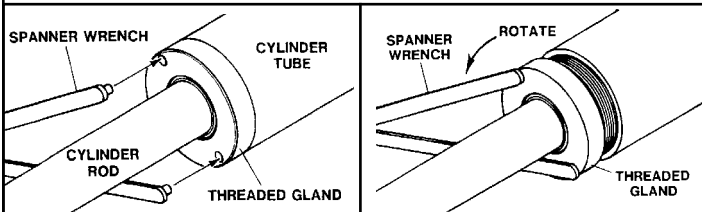
The following information is provided to assist you in the event you should need to repair or rebuild a hydraulic cylinder. When working on hydraulic cylinders, make sure that the work area and tools are clean and free of dirt to prevent contamination of the hydraulic system and damage to the hydraulic cylinders. Always protect the active part of the cylinder rod (the chrome section). Nicks or scratches on the surface of the rod could result in cylinder failure. Clean all parts thoroughly with a cleaning solvent before reassembly.

DISASSEMBLY PROCEDURE

IMPORTANT: Do not contact the active surface of the cylinder rod with the vise. Damage to the rod could result.

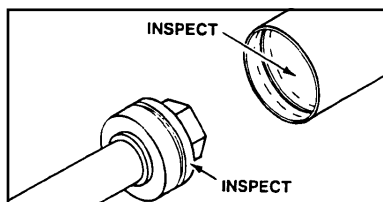
THREADED TYPE GLAND

1. Rotate the gland with a spanner wrench counter-clockwise until the gland is free of the cylinder tube.



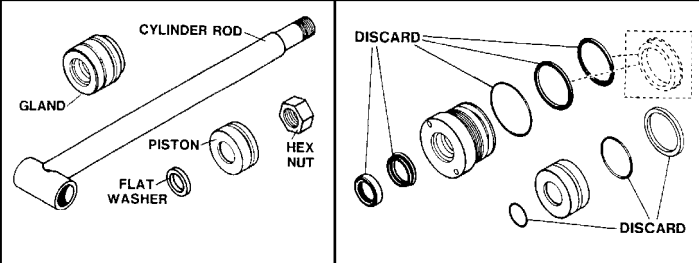
2. Pull the cylinder rod from the cylinder tube.

3. Inspect the piston and the bore of the cylinder tube for deep scratches or galling. If damaged, the piston and cylinder tube must be replaced.



4. Remove the hex nut, piston, flat washer or spacer tube (if so equipped), and gland from the cylinder rod. If the cylinder rod is rusty, scratched, or bent, it must be replaced.

5. Remove and discard all the old seals.

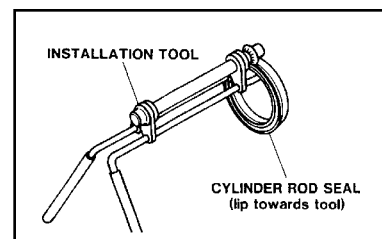


ASSEMBLY PROCEDURE

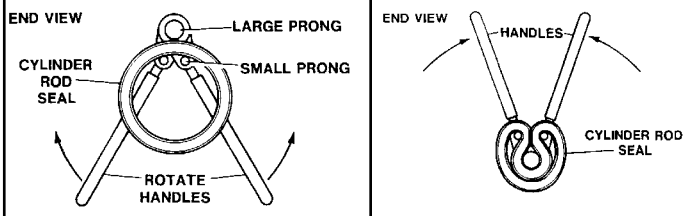
IMPORTANT: Replace all seals even if they do not appear to be damaged. Failure to replace all seals may result in premature cylinder failure.

1. Install the cylinder rod seal in the gland first. Be careful not to damage the seal in the process as it is somewhat difficult to install.

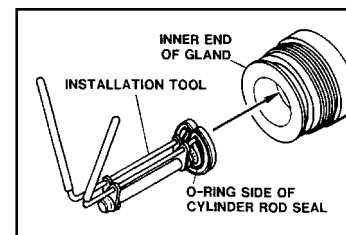
A special installation tool (Part #5MP65349) is available to help with installing the seal. Simply fit the end of the tool over the seal so that the large prong of the tool is on the outside of the seal, and the two smaller prongs on the inside. The lip of the seal should be facing towards the tool.



Rotate the handles on the tool around to wrap the seal around the end of the tool.

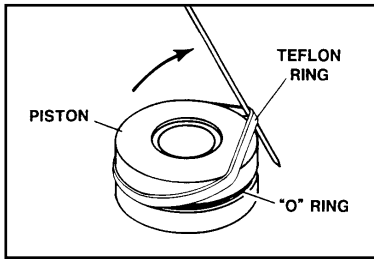


Now insert the seal into the gland from the inner end. Position the seal in its groove, and release and remove the tool. Press the seal into its seat the rest of the way by hand.



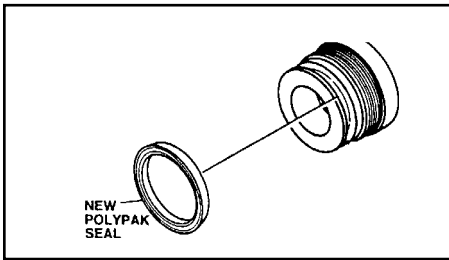
2. Install the new piston ring, rod wiper, O-rings and backup washers if applicable on the piston.

Be careful not to damage the seals. Caution must be used when installing the piston ring. The ring must be stretched carefully over the piston with a smooth, round, pointed tool.

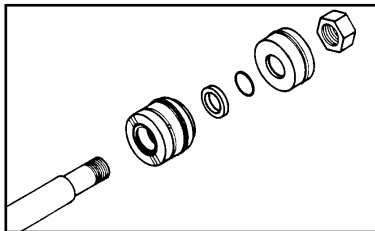


3. After installing the rod seal inside the gland as shown in step #1, install the external seal.

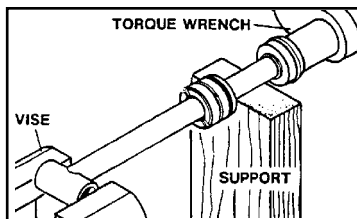
NOTE: Threaded glands may have been equipped with a separate O-ring and backup washer system or a polypak (all in one) type seal. Current seal kits contain a polypak (all in one) type seal to replace the discarded seal types on ALL THREADED GLANDS.



4. Slide the gland onto the cylinder rod being careful not to damage the rod wiper. Then install the spacer, or flat washer (if so equipped), small o-ring, piston, and hex nut onto the end of the cylinder rod.



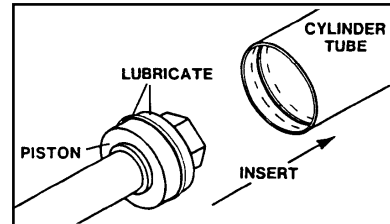
5. Secure the cylinder rod (mounting end) in a vise with a support at its center. Torque the nut to the amount shown for the thread diameter of the cylinder rod (see chart).



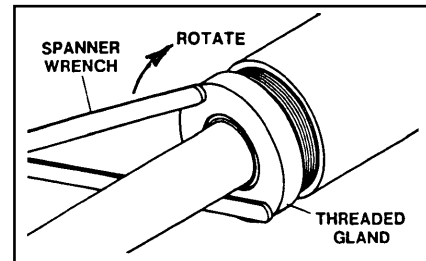
IMPORTANT: Do not contact the active surface of the cylinder rod with the vise. Damage to the rod could result.

6. Apply a lubricant (such as Lubriplate #105) to the piston and teflon ring. Insert the cylinder rod assembly into the cylinder tube.

IMPORTANT: Ensure that the piston ring fits squarely into the cylinder tube and piston groove, otherwise the ring may be damaged and a leak will occur.



7. Use a spanner wrench to rotate the gland clockwise into the cylinder. Continue to rotate the gland with the spanner wrench until it is tight.



NOTE: Seal kits will service most cylinders of similar bore size and rod diameter.

WARNING!



Cylinders serviced in the field are to be tested for leakage prior to the attachment being placed in work. Failure to test rebuilt cylinders could result in damage to the cylinder and/or the attachment, cause severe personal injury or even death.

TORQUE SPECIFICATION CHART

Use the following torque values when tightening the nuts on the cylinder rod threads.

Thread Diameter	POUNDS - FEET	
	Minimum	Maximum
7/8"	150	200
*1"	230	325
1-1/8"	350	480
1-1/4"	490	670
1-3/8"	670	900

* 1" Thread Diameter WITH 1.25" Rod Diameter
Min. 230 ft. lbs. Max. 250 ft. lbs.

Limited Warranty

All new Bradco/McMillen/The Major products are warranted to be free from defects in material and/or workmanship during its warranty period. Under no circumstances will it cover any merchandise or components thereof, which, in the opinion of the company, has been subject to misuse, unauthorized modifications, alteration, an accident or if repairs have been made with parts other than those obtainable through Bradco/McMillen/The Major.

In the event of failure within the warranty period from initial retail sale, first lease or rental date (excluding cable, ground engaging parts such as sprockets, digging chain, bearings, teeth, tamping and demolition heads, blade cutting edges, pilot bits, auger teeth, auger heads, and broom brushes). If after examination, Bradco/McMillen/The Major determines failure was due to defective material and/or workmanship, part(s) will be repaired or replaced by Bradco/McMillen/The Major. Bradco/McMillen/The Major may request defective part(s) be returned prepaid to them for inspection at their place of business at Delhi, Iowa, or to a location specified by Bradco/McMillen/The Major.

Any claims under this warranty must be made within fifteen (15) days from date of repair, all claims not made in writing and received by Bradco/McMillen/The Major within the time period specified above shall be denied.

Limitations on Bradco/McMillen/ The Major's Responsibility

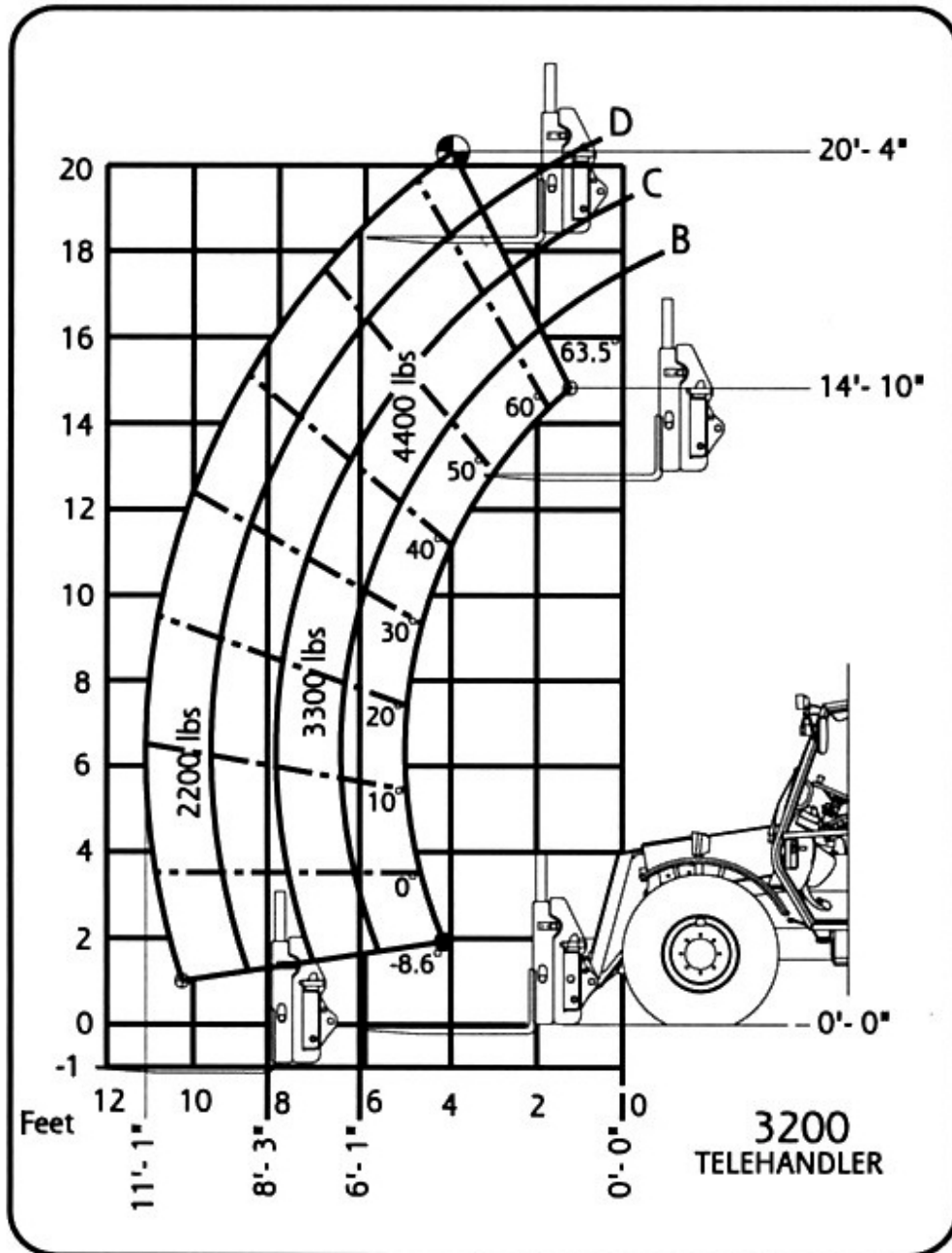
THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE . IN NO EVENT SHALL BRADCO/MCMILLEN/THE MAJOR BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGE.

BRADCO/MCMILLEN/THE MAJOR LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES TO BUYER, RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING BRADCO/MCMILLEN/THE MAJOR NEGLIGENCE, IRRESPECTIVE OF WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCTS WITH RESPECT TO WHICH LOSSES OR DAMAGES ARE CLAIMED, OR, AT THE ELECTION OF BRADCO/MCMILLEN/THE MAJOR, THE REPAIR OR REPLACEMENT OF DEFECTIVE OR DAMAGED PRODUCTS.

LOAD CHART #Z75401

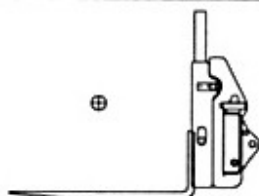


THIS LOAD CHART IS FOR REFERENCE ONLY - ORDER PART #Z75401 FROM YOUR JD DEALER



JOHN DEERE

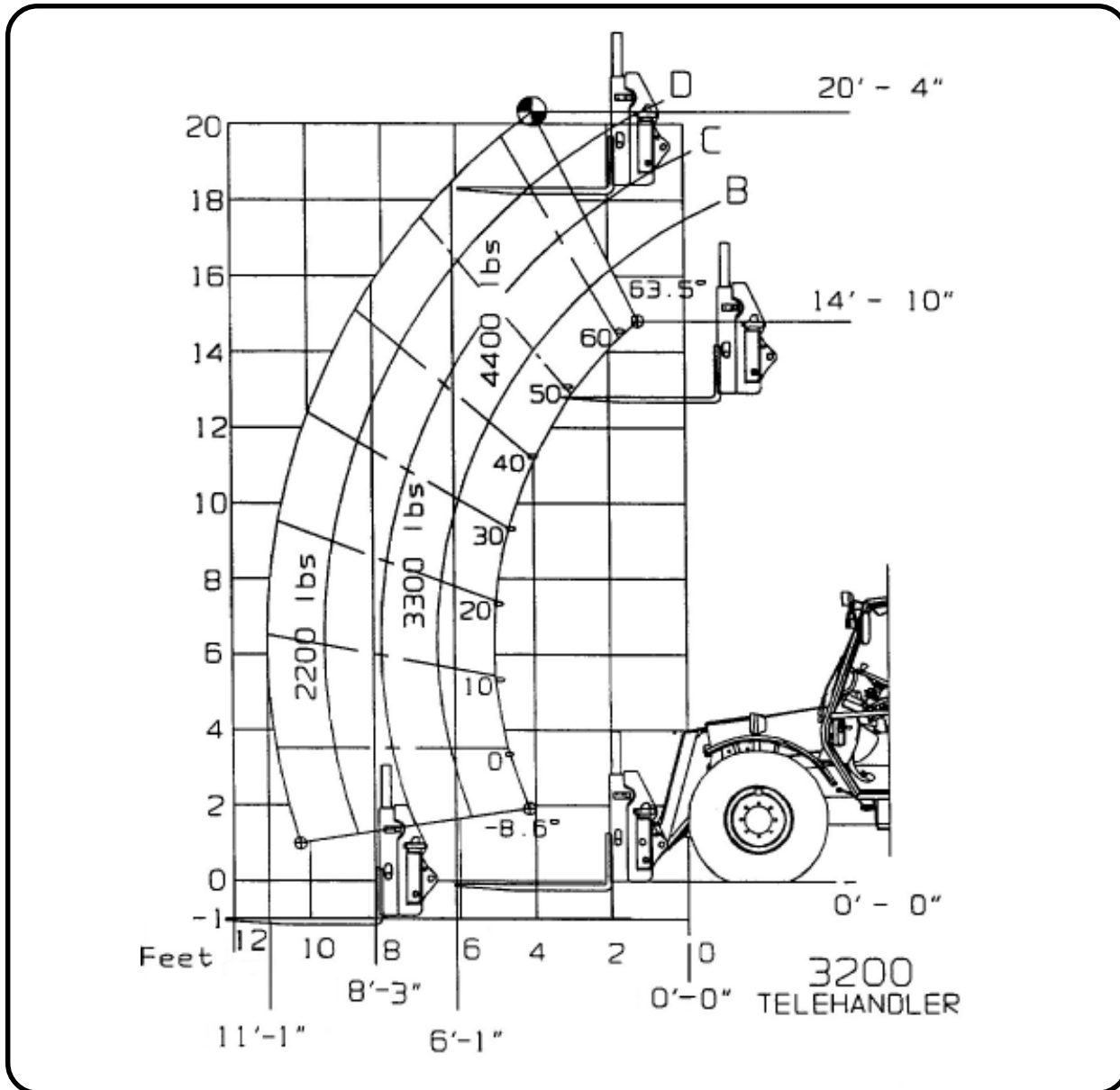
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 Model QC1072
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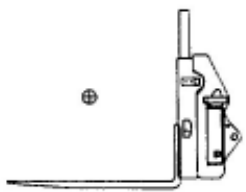


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JOHN DEERE

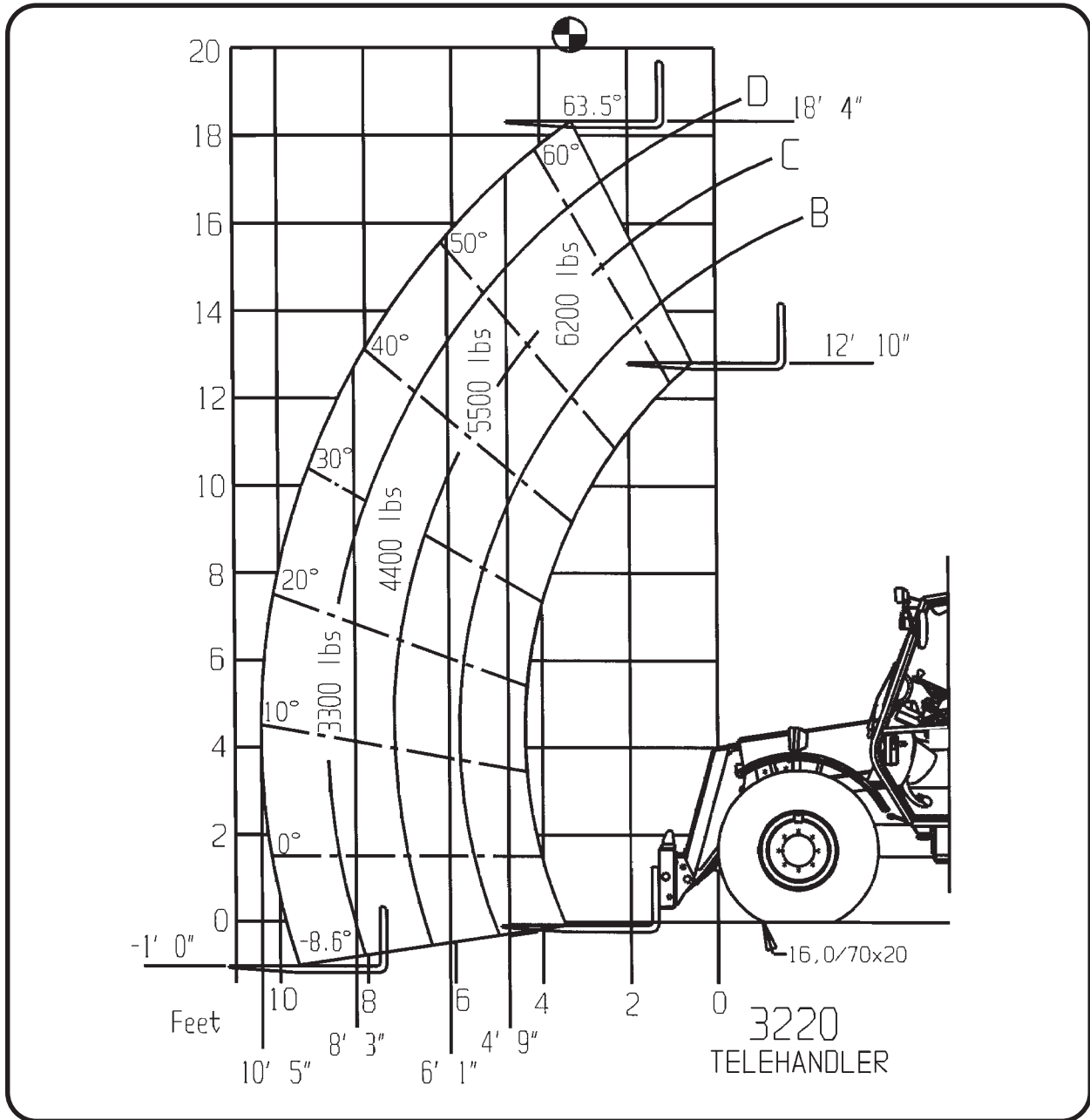
Attachment Mnf:
 Frontier
 Model 4058, 4084, 4085
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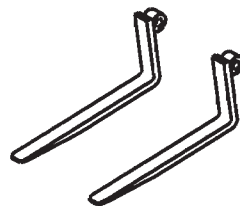
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THIS LOAD CHART IS FOR REFERENCE ONLY - ORDER PART #Z81494 FROM YOUR JD DEALER



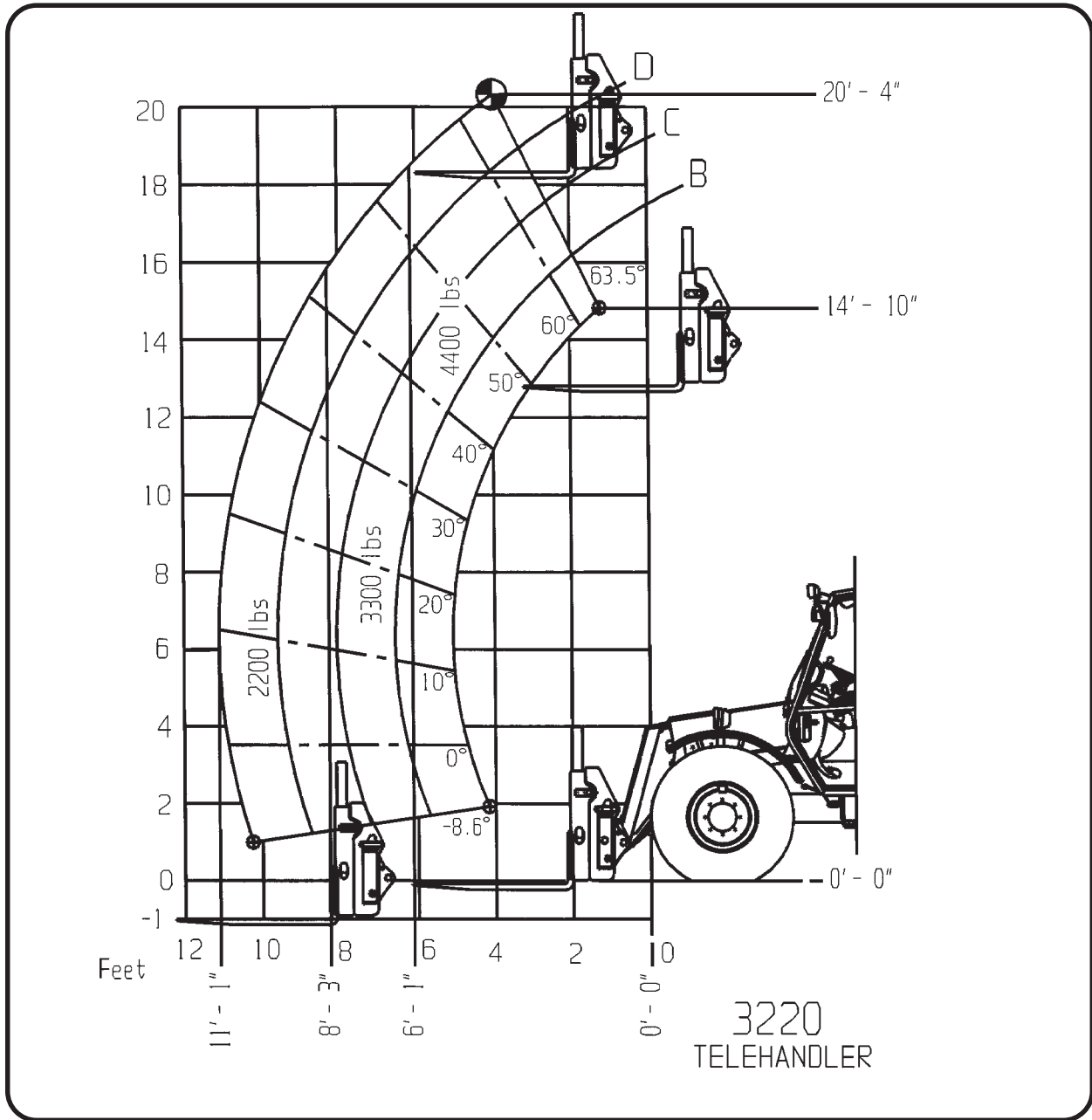
JOHN DEERE STANDARD FORKS 42"



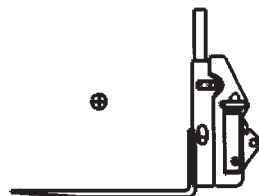
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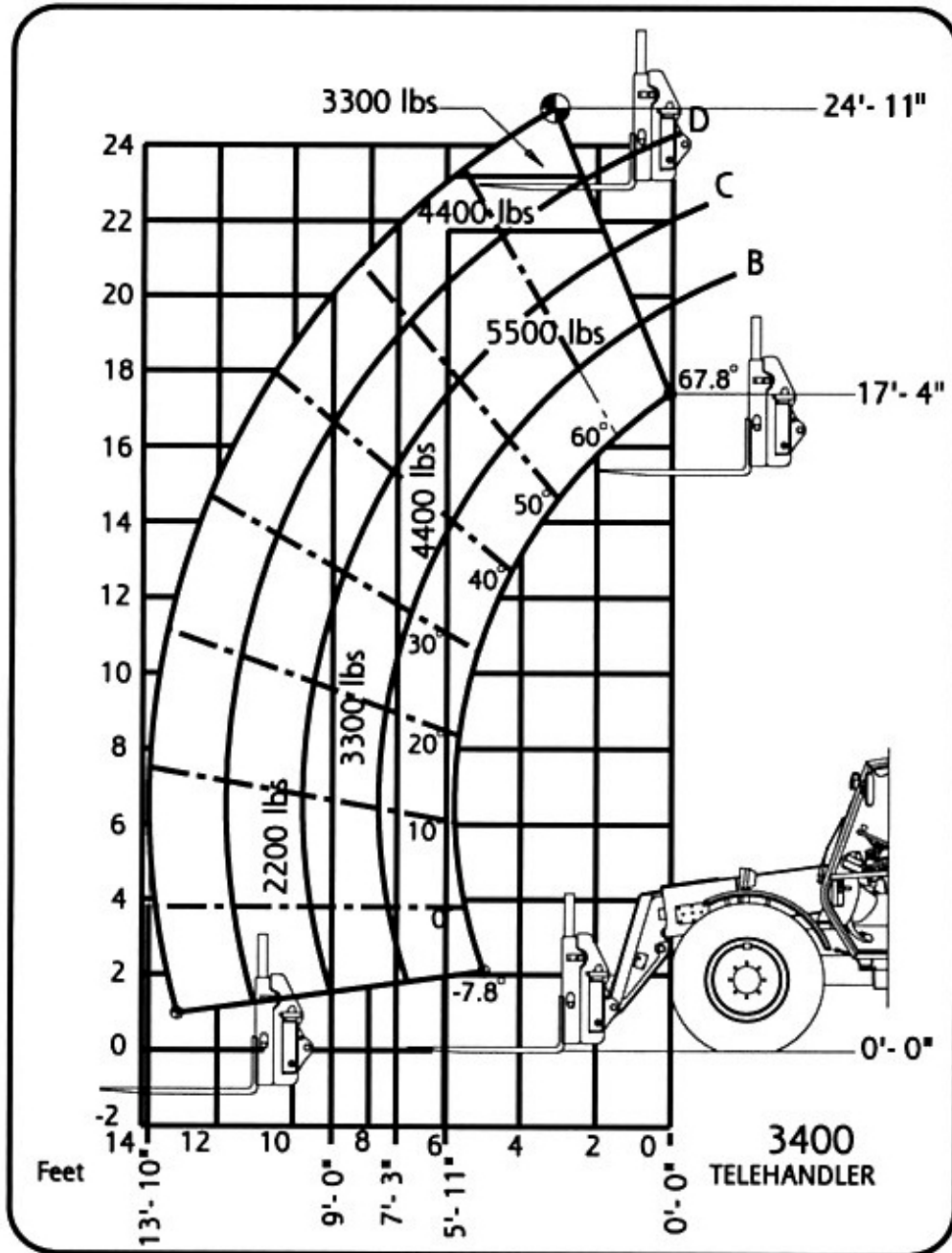
JOHN DEERE Attachment Mnf:
Frontier
Model 4085, 4084, 4058, QC1072
Weight 1075 lbs.



LOAD CHART #Z75402



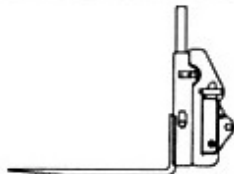
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JOHN DEERE

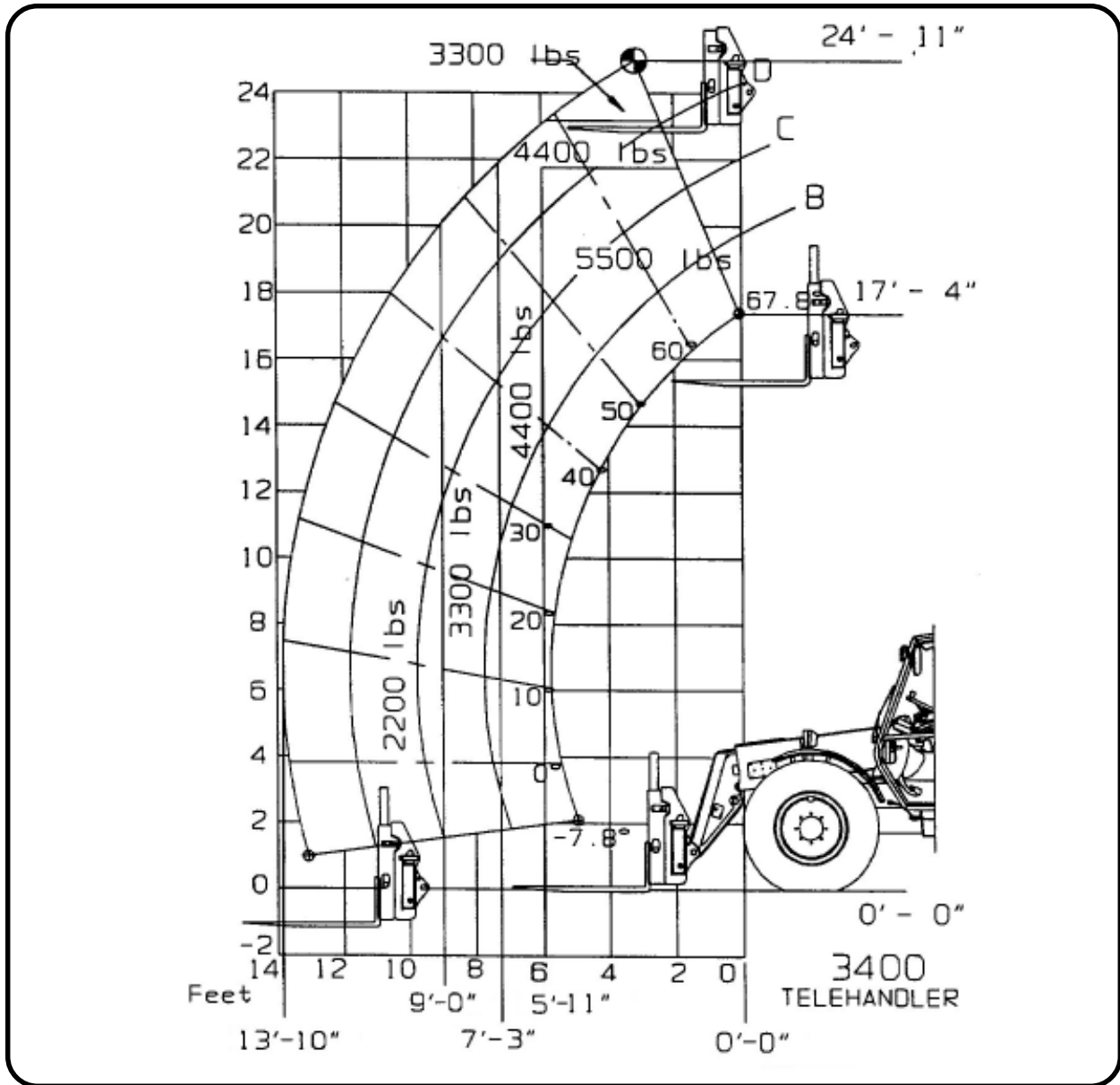
Attachment Mnf:
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 Model QC1072
 Weight 1075 lbs.



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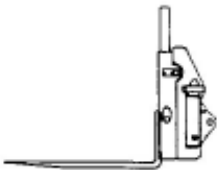


THIS LOAD CHART IS FOR REFERENCE ONLY - ORDER PART #TMPLDCT006 FROM YOUR JD DEALER



JOHN DEERE

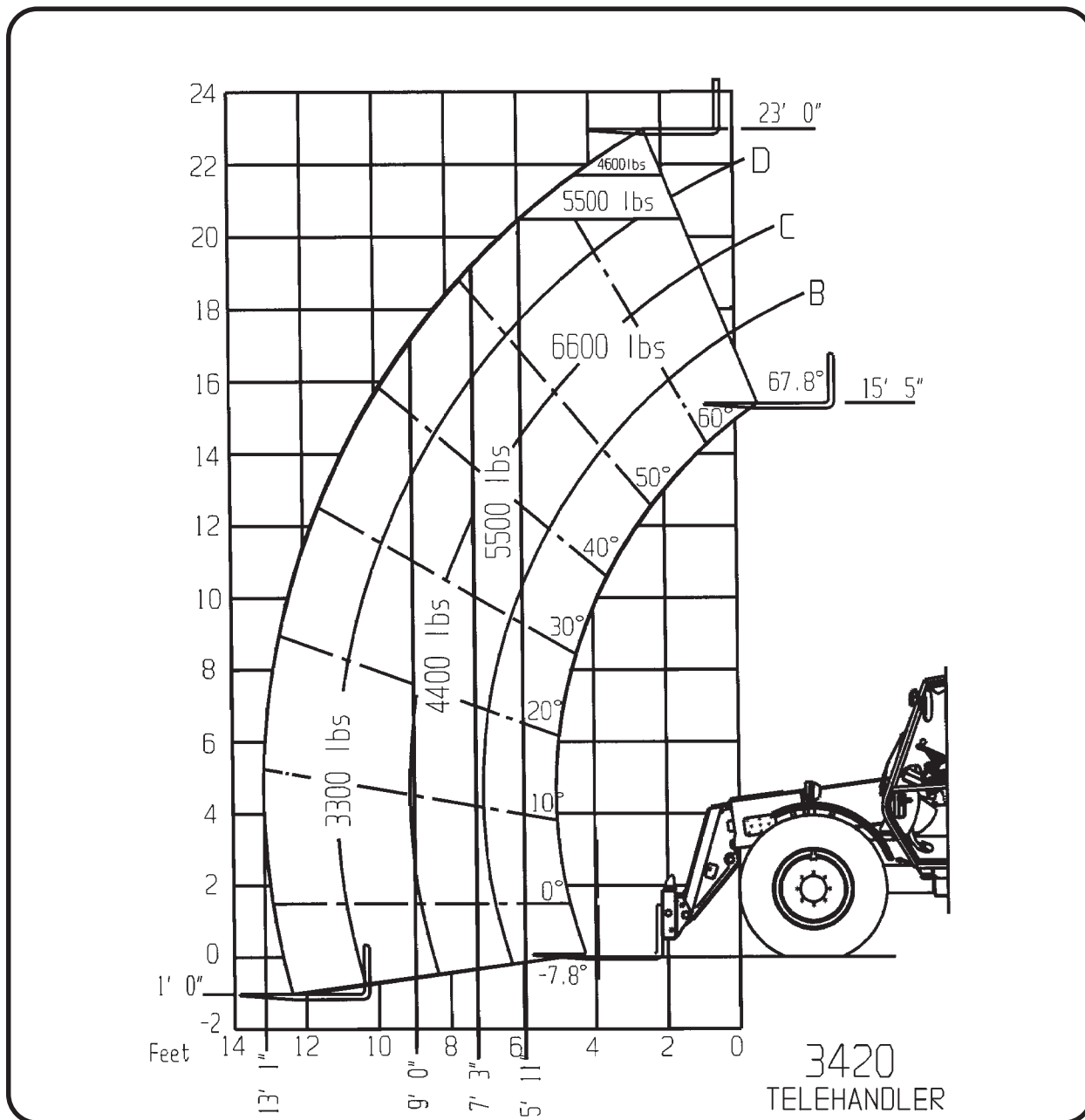
Attachment Mnf:
 Frontier
 Model 4058, 4084, 4085
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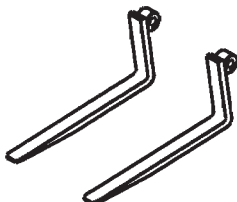
LOAD CHART #Z81510



THIS LOAD CHART IS FOR REFERENCE ONLY - ORDER PART #Z81510 FROM YOUR JD DEALER



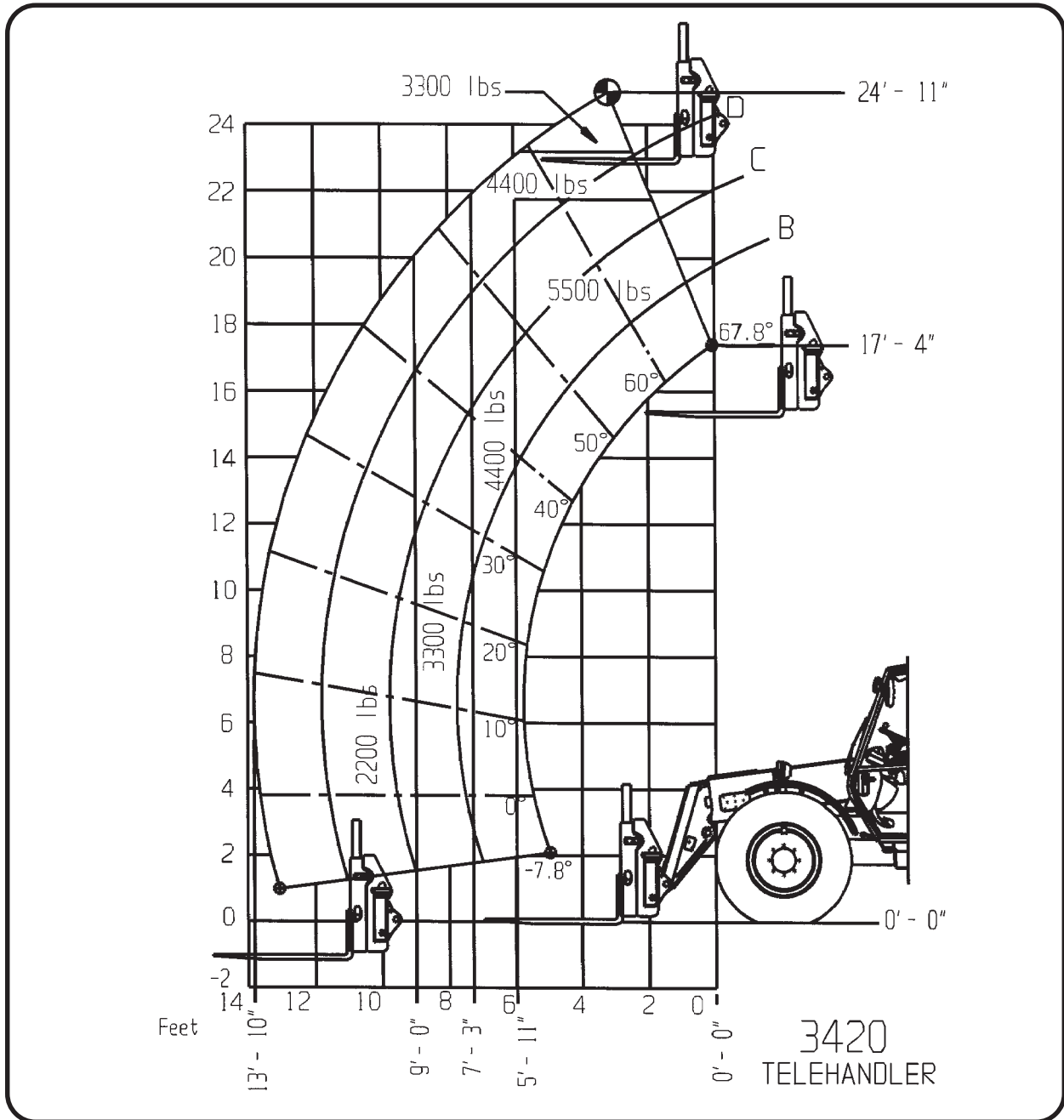
JOHN DEERE STANDARD FORKS 42"



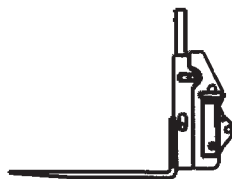
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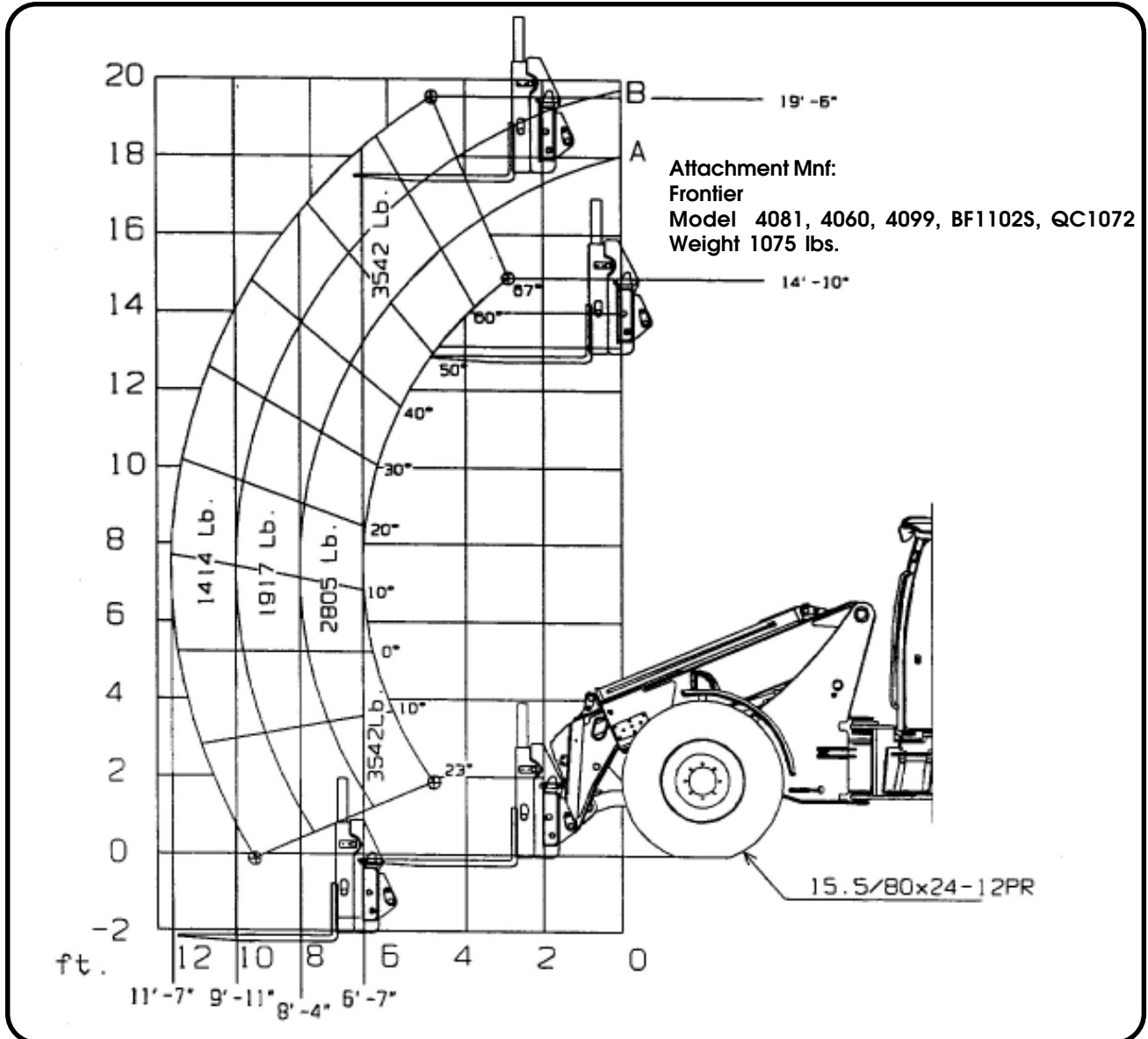
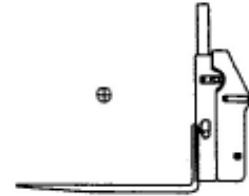
JOHN DEERE Attachment Mnf:
 Frontier
 Model 4085, 4084, 4058, QC1072
 Weight 1075 lbs.



LOAD CHART #TMPLDCT001



THIS LOAD CHART IS FOR REFERENCE ONLY - ORDER PART #TMPLDCT001 FROM YOUR JD DEALER



LOAD CHART #Z78616



THIS LOAD CHART IS FOR REFERENCE ONLY - ORDER PART #Z78616 FROM YOUR JD DEALER

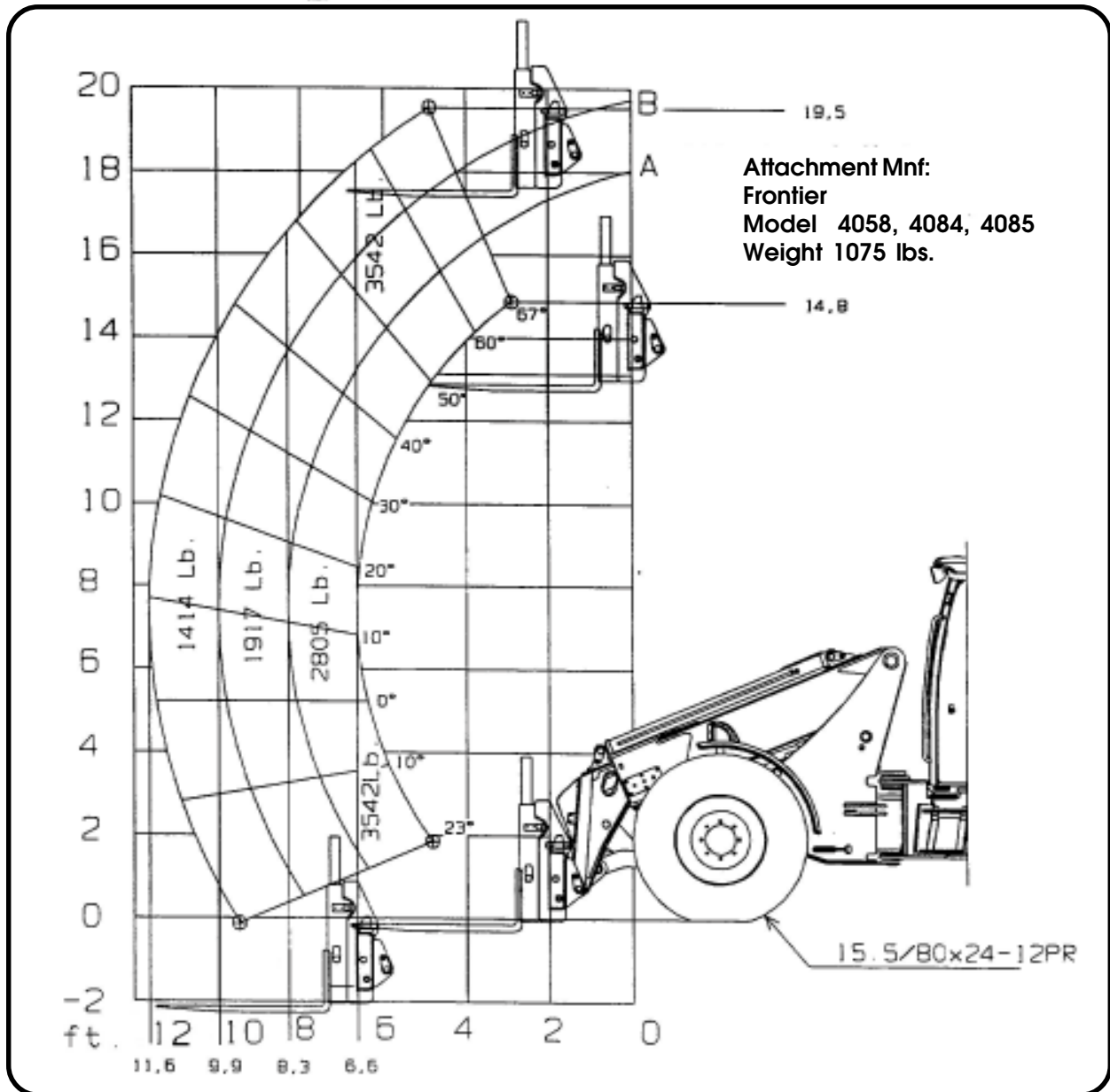
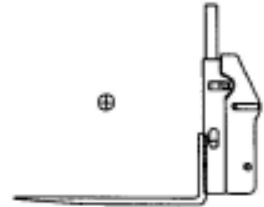


Figure 1. MJ4058, 48" Fork Carriage

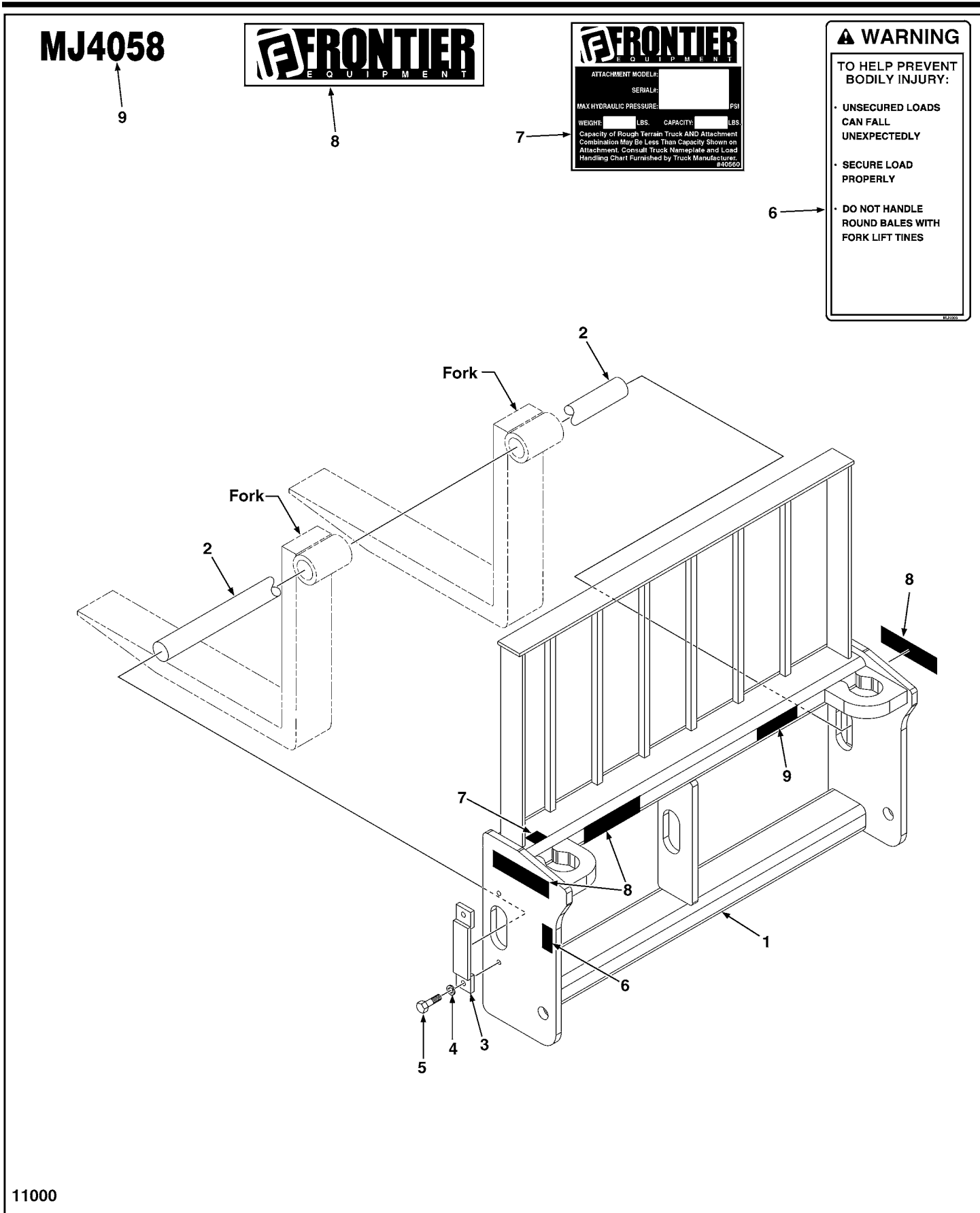


Figure 1. MJ4058, 48" Fork Carriage



ITEM	PART NUMBER	QTY	DESCRIPTION
1	-----	1	MJ4058 Fork Carriage
2	5MP14003	1	Pin, Fork, 2" Dia. x 49-1/4" Long
3	5MP14002	2	Retainer Assembly, Fork Pin
4	5MP1505	4	Washer, Lock, 1/2"
5	5MP1339	4	Bolt, Hex Head, 1/2"-20UNF x 1-1/4" Long
6	5MP40526	2	Decal, Warning, Prevent Bodily Injury
7	-----	1	Serial Number, Identification Tag Location
8	5MP40638	3	Decal, Frontier Logo
9	5MP40618	1	Decal, Model MJ4058

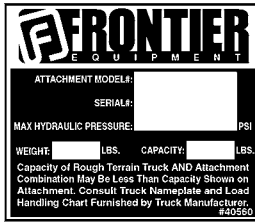
Figure 2. MJ4084, 48" Side Tilt Fork Carriage



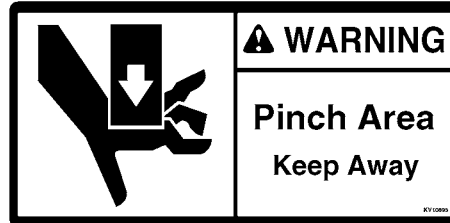
MJ4084

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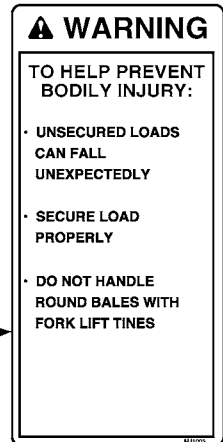
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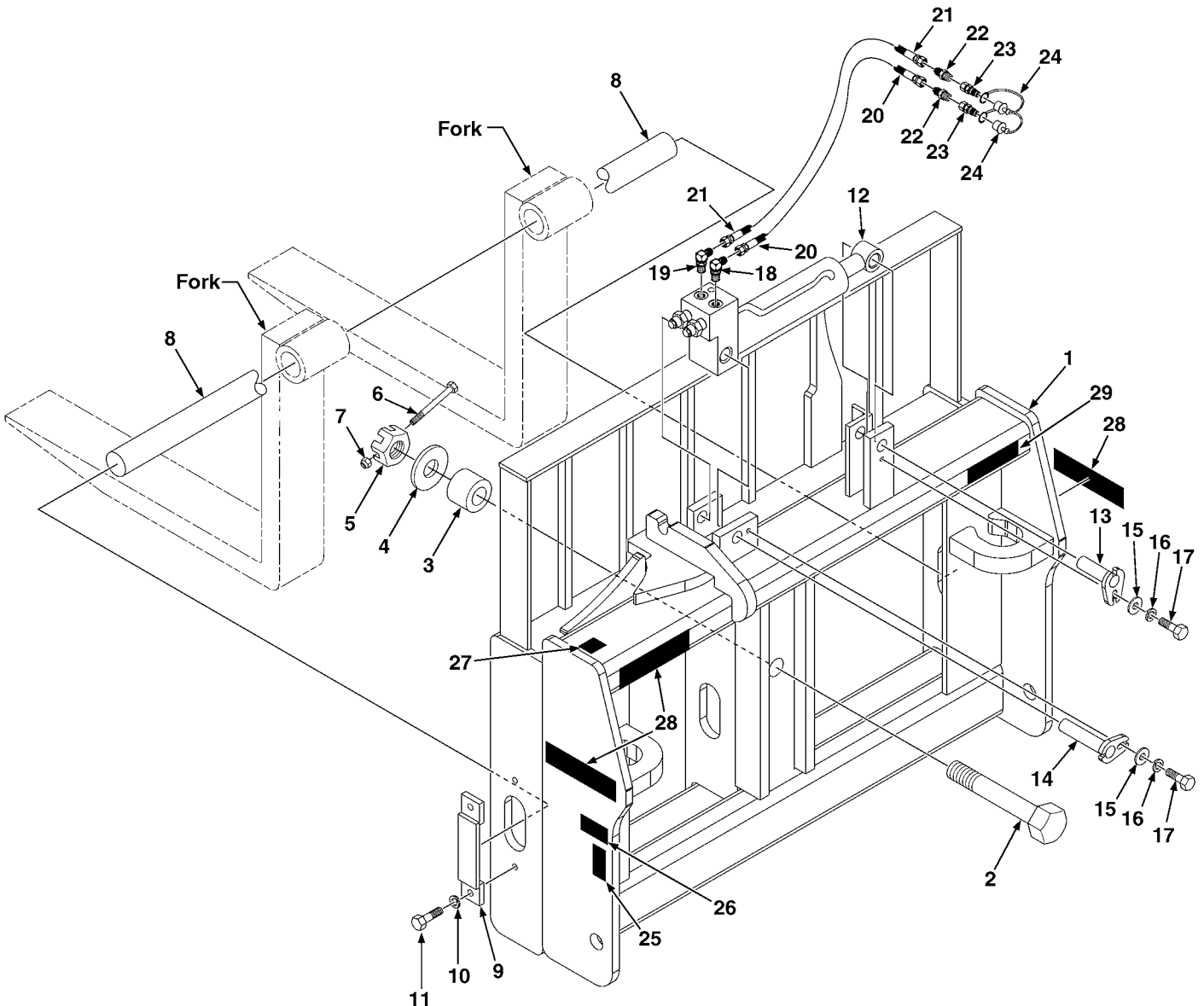


Figure 2. MJ4084, 48" Side Tilt Fork Carriage



ITEM	PART NUMBER	QTY	DESCRIPTION
1	-----	1	MJ4084 Side Tilt Fork Carriage
2	5MP10013	1	Bolt, Hex Head, Grade 8, 1-1/2"-12UNF x 7" Long
3	5MP14099	1	Spacer, Bearing
4	5MP1522	1	Washer, Flat, 1-1/2"
5	5MP10019	1	Nut, Hex, Castle, 1-1/2"-12UNF
6	5MP1050	1	Bolt, Hex Head, 3/8"-16UNC x 2-3/4" Long
7	5MP1837	1	Nut, Hex, Deformed Oval Lock, 3/8"-16UNC
8	5MP14003	1	Pin, Fork, 2" Dia. x 49-1/4" Long
9	5MP14002	2	Retainer Assembly, Fork Pin
10	5MP1505	4	Washer, Lock, 1/2"
11	5MP1339	4	Bolt, Hex Head, 1/2"-20UNF x 1-1/4" Long
12	5MP89113	1	Cylinder Assembly, 2-1/2" Bore x 8" Stroke
13	5MP14071	1	Pin, Locking, 1" Dia. x 3-1/4" Long
14	5MP14070	1	Pin, Locking, 1" Dia. x 4-5/8" Long
15	5MP1514	2	Washer, Flat, 3/8"
16	5MP1503	2	Washer, Lock, 3/8"
17	5MP1293	2	Bolt, Hex Head, 3/8"-24UNF x 1" Long
18	5MP30204	1	Fitting, 90°, 6MBo x 6MORFS
19	5MP30209	1	Fitting, 90°, 6MBo x 6MORFS, W/.027 Orifice
20	5MP37808	1	Hose Assembly, 3/8" Dia. x 28" Long
21	5MP37809	1	Hose Assembly, 3/8" Dia. x 35" Long
22	5MP22552	2	Fitting, Straight, 8MORFS x 10MBo
23	5MP31886	2	Quick Connect, Female
24	5MP51754	2	Cover, Female Quick Connect
25	5MP40526	2	Decal, Warning, Prevent Bodily Injury
26	5MP40524	2	Decal, Warning, Pinch Area
27	-----	1	Serial Number, Identification Tag Location
28	5MP40638	3	Decal, Frontier Logo
29	5MP40628	1	Decal, Model MJ4084

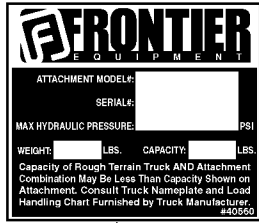
Figure 3. MJ4085, 48" Side Shift Fork Carriage



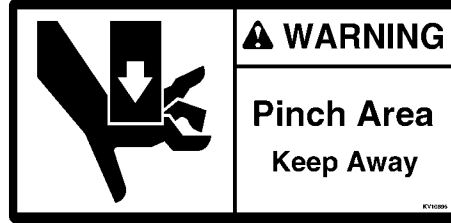
MJ4085

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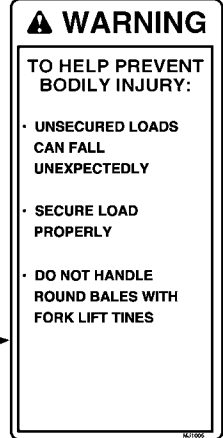
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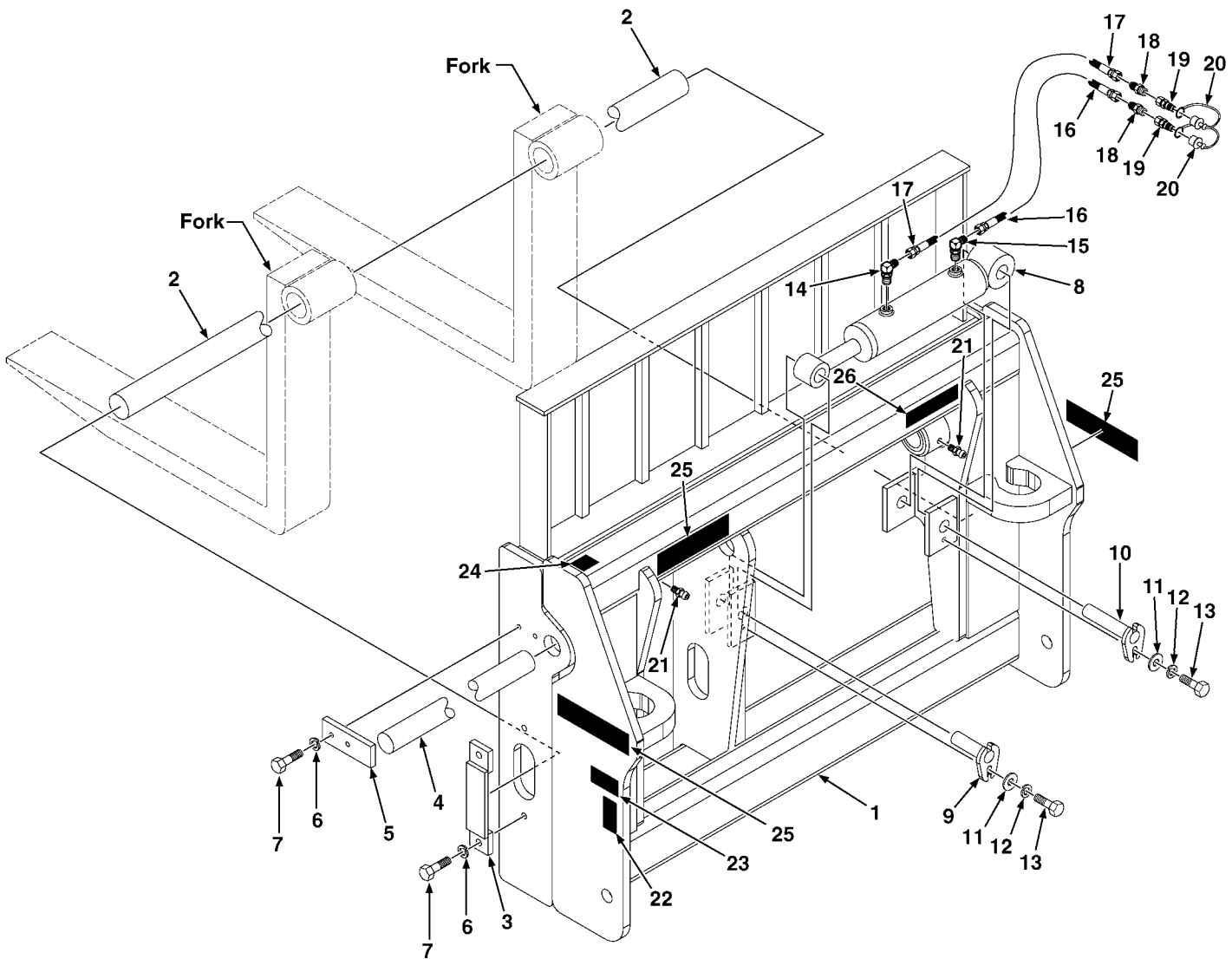


Figure 3. MJ4085, 48" Side Shift Fork Carriage



ITEM	PART NUMBER	QTY	DESCRIPTION
1	-----	1	MJ4085 Side Shift Carriage
2	5MP14003	1	Pin, Fork, 2" Dia. x 49-1/4" Long
3	5MP14002	1	Retainer Assembly, Fork Pin
4	5MP14065	1	Pin, 2" Dia. x 48-1/2" Long
5	5MP14896	1	Retainer Assembly, Pin
6	5MP1505	4	Washer, Lock, 1/2"
7	5MP1339	4	Bolt, Hex Head, 1/2"-20UNF x 1-1/4" Long
8	5MP88928	1	Cylinder Assembly, 2-1/2" Bore x 8" Stroke
9	5MP14071	1	Pin, Locking, 1" Dia. x 3-1/4" Long
10	5MP14070	1	Pin, Locking, 1" Dia. x 4-5/8" Long
11	5MP1514	2	Washer. Flat, 3/8"
12	5MP1503	2	Washer, Lock, 3/8"
13	5MP1293	2	Bolt, Hex Head, 3/8"-24UNF x 3/4" Long
14	5MP30204	2	Fitting, 90°, 6MBo x 6MORFS
15	5MP30209	2	Fitting, 90°, 6MBo x 6MORFS, W/.027 Orifice
16	5MP37808	1	Hose Assembly, 3/8" Dia. x 24" Long
17	5MP37809	1	Hose Assembly, 3/8" Dia. x 31" Long
18	5MP22552	2	Fitting, Straight, 8MORFS X 10MBo
19	5MP31886	2	Quick Connect, Female
20	5MP14166	2	Cover, Female Quick Connect
21	5MP9371	2	Fitting, Grease, .12NPT
22	5MP40526	2	Decal, Caution, Prevent Bodily Injury
23	5MP40524	2	Decal, Warning, Pinch Area
24	-----	1	Serial Number, Identification Tag Location
25	5MP40638	3	Decal, Frontier Logo
26	5MP40621	1	Decal, Model MJ4085

Figure 4. 5MP89113, Cylinder Assembly
2-1/2" Bore x 8" Stroke

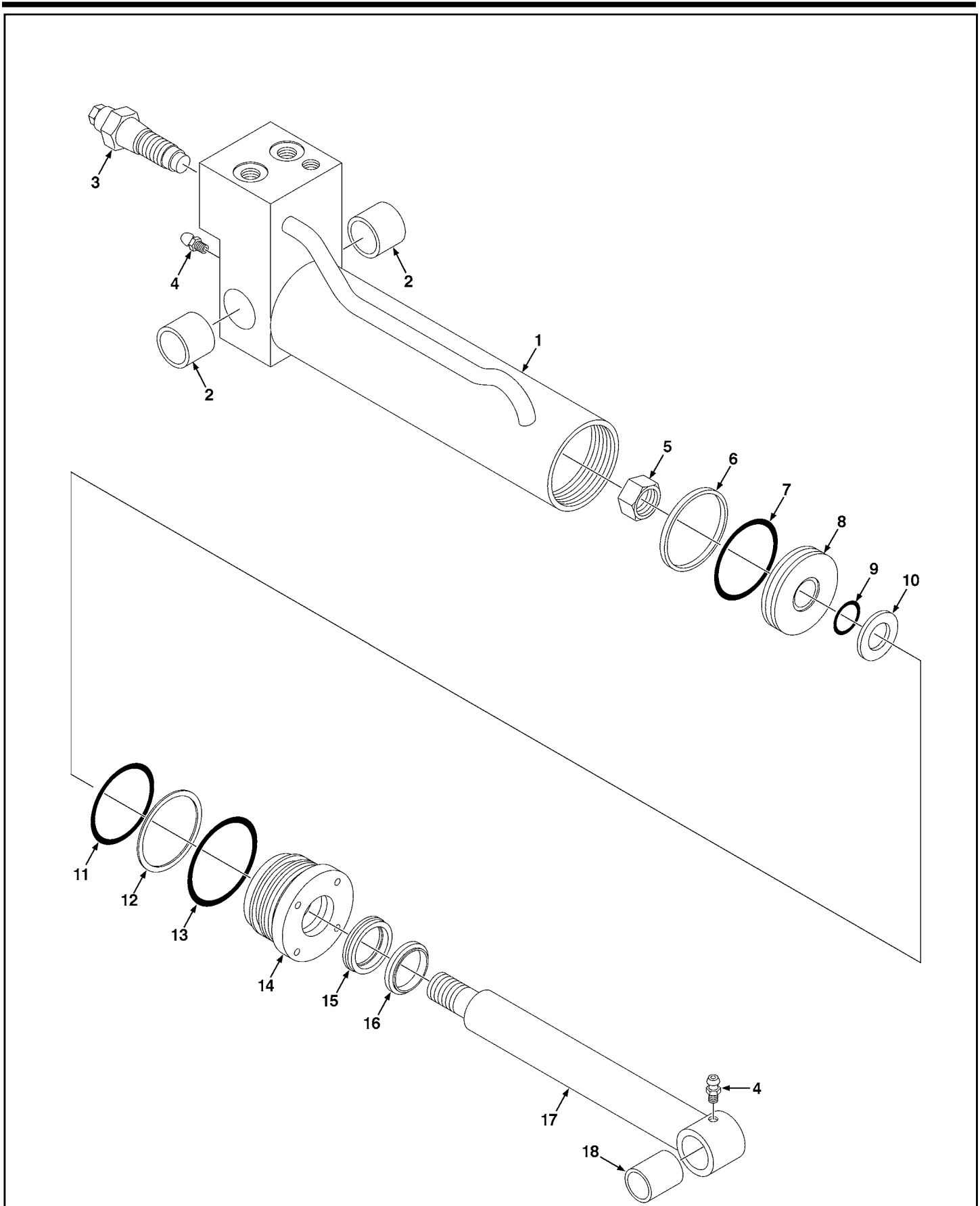
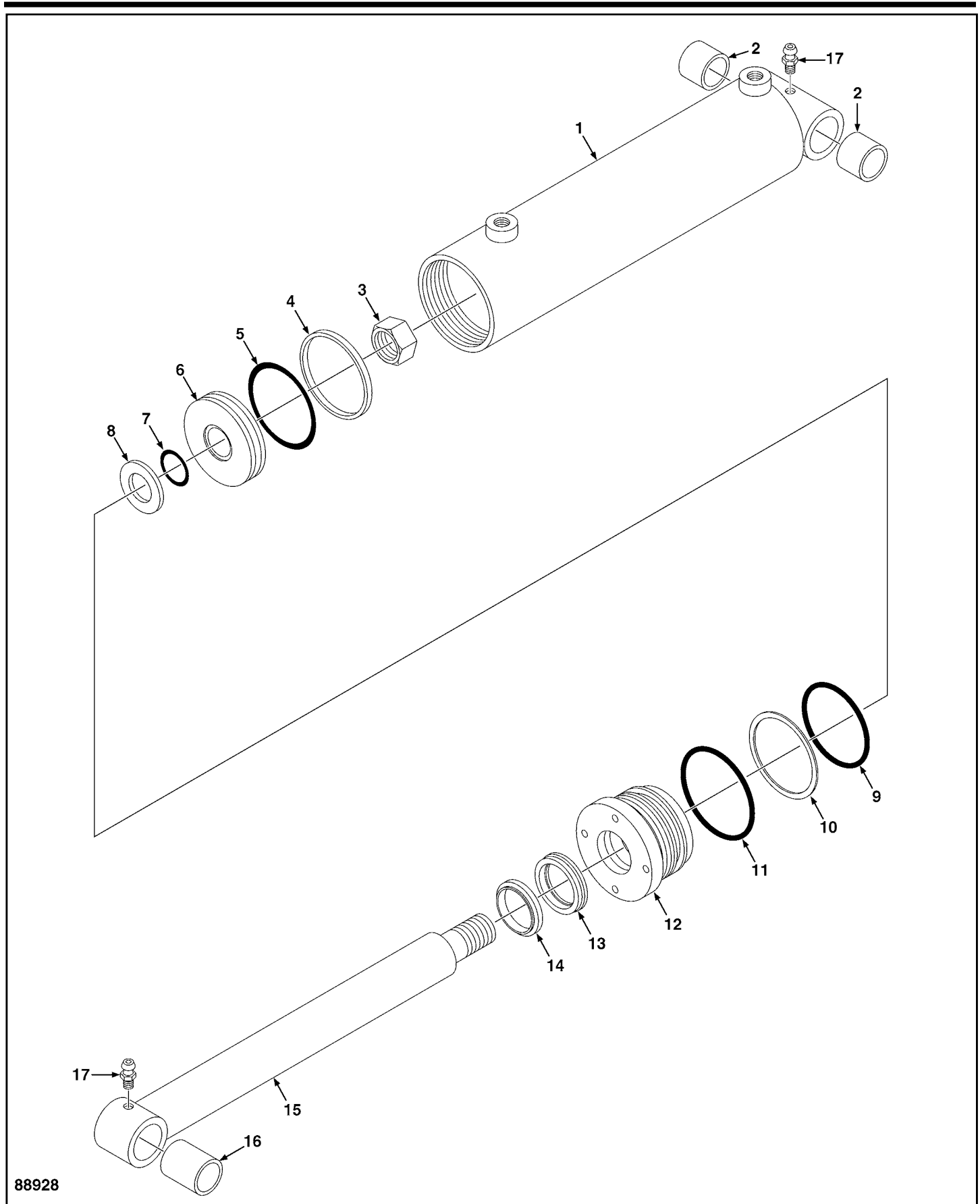


Figure 4. 5MP89113, Cylinder Assembly 2-1/2" Bore x 8" Stroke



ITEM	PART NUMBER	QTY	DESCRIPTION
1	5MP89114	1	Tube, Cylinder, With Valve
2	5MP88919	2	Bushing
3	5MP89120	2	Valve Cartridge - Over Center
4	5MP6616	2	Fitting, Grease, 1/4"-28UNF
5	5MP1483	1	Nut, Hex
6	*	1	Ring, Piston
7	*	1	O-Ring
8	5MP50252	1	Piston
9	*	1	O-Ring
10	5MP5421	1	Washer
11	*	1	O-Ring
12	*	1	Washer, Back-Up
13	*	1	O-Ring
14	5MP77458	1	Gland, Cylinder
15	*	1	Seal, Poly-Pak
16	*	1	Wiper, Rod
17	5MP88927	1	Rod, Cylinder
18	5MP88918	1	Bushing
	5MP45617	1	Kit, Cylinder Packing, Includes all parts marked with an asterisk(*). Parts are not sold separately.

Figure 5. 5MP88928, Cylinder Assembly
2-1/2" Bore x 8" Stroke



88928

**Figure 5. 5MP88928, Cylinder Assembly
2-1/2" Bore x 8" Stroke**

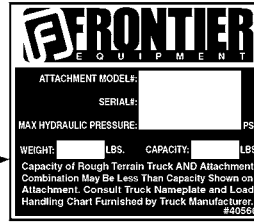


ITEM	PART NUMBER	QTY	DESCRIPTION
1	5MP88926	1	Jacket Assembly
2	5MP88919	2	Bushing, Bronze
3	5MP1483	1	Nut, Lock
4	*	1	Ring, Piston
5	*	1	Seal Ring
6	5MP50252	1	Piston, Aluminum
7	*	1	Seal Ring
8	5MP5421	1	Washer
9	*	1	Seal Ring
10	*	1	Washer, Backup
11	*	1	Seal Ring
12	5MP77458	1	Gland
13	*	1	Polypak, Type B
14	*	1	Wiper, Rod
15	5MP88927	1	Rod, Piston
16	5MP88918	1	Bushing, Bronze
17	5MP6616	2	Fitting, Grease, 1/4"-28UNF
	5MP45617	1	Kit, Cylinder Packing, Includes all parts marked with an asterisk(*). Parts are not sold separately.

Figure 6. QC1072, 72" Fork Carriage



QC1072



WARNING

TO HELP PREVENT BODILY INJURY:

- ⚠ UNSECURED LOADS CAN FALL UNEXPECTEDLY
- ⚠ SECURE LOAD PROPERLY
- ⚠ DO NOT HANDLE ROUND BALES WITH FORK LIFT TINES

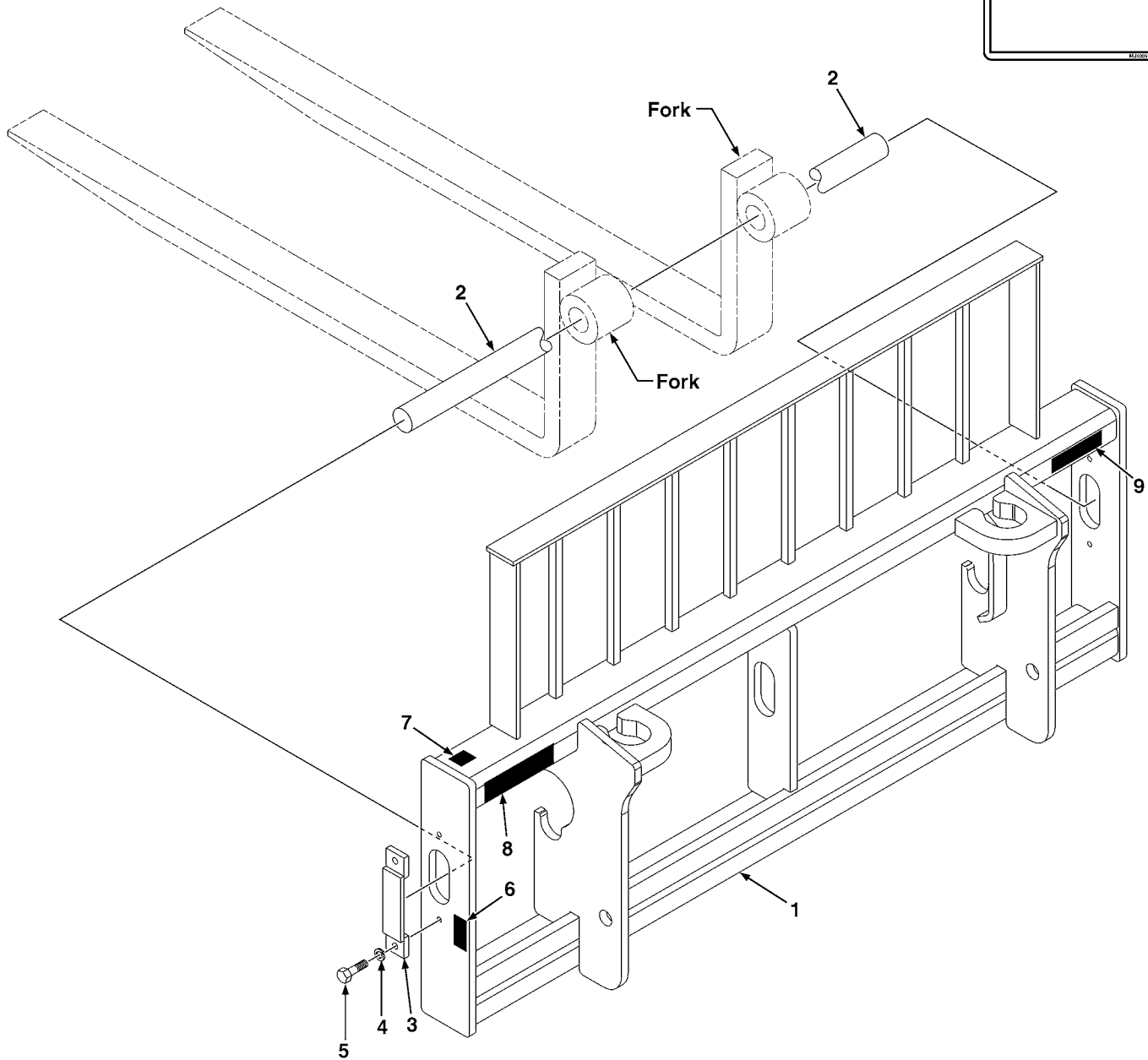


Figure 6. QC1072, 72" Fork Carriage



ITEM	PART NUMBER	QTY	DESCRIPTION
1	-----	1	QC1072 Fork Carriage
2	5MP14780	1	Pin, Fork, 2" Dia. x 74-1/4" Long
3	5MP14002	2	Retainer Assembly, Fork Pin
4	5MP1505	4	Washer, Lock, 1/2"
5	5MP1339	4	Bolt, Hex Head, 1/2"-20UNF x 1-1/4" Long
6	5MP40526	2	Decal, Warning, Prevent Bodily Injury
7	-----	1	Serial Number, Identification Tag Location
8	5MP40638		Decal, Frontier Logo
9	5MP40635	1	Decal, Model QC1072

Figure 7. Replacement Forks

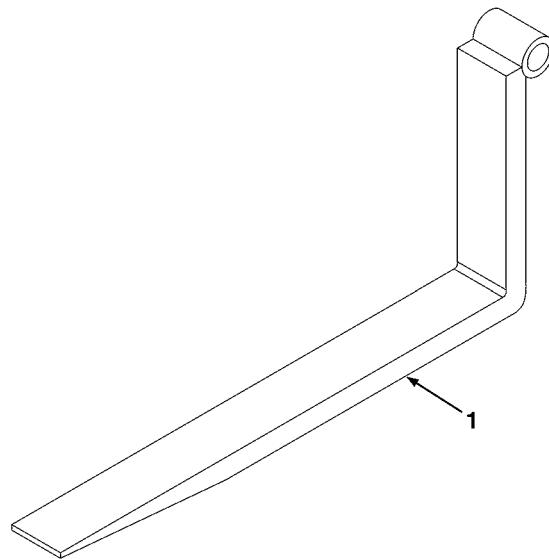


Figure 7. Replacement Forks



ITEM	PART NUMBER	QTY	DESCRIPTION
1	5MP11906	-----	Tine, Pallet Fork, 42" x 4" x 1-3/4" (Pair)
	5MP11907	-----	Tine, Pallet Fork, 48" x 4" x 1-3/4" (Pair)
	5MP12262	-----	Tine, Pallet Fork, 60" x 4" x 1-3/4" (Pair)