

# Parts & Service Manual for MONROE GLED QUICK LINK ARROWHEAD (Tor-Lock) BRACE KITS AQC Hitch



05090296-6 7/24/2014

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- Use only Monroe Truck Equipment O.E.M. replacement parts. Failure to do so will void the warranty.
- Location descriptions are noted in direction of travel (i.e. front, rear, left and right).
- Delivery of replacement parts is subject to our sales delivery terms.
- Replacement parts listed in this manual reflect the most common items for this product. If you do not find the part you require, please call your distributor.
- Monroe Truck Equipment reserves the right to make revisions or alterations to the parts manual at any time.

### How to Order Parts

To order or inquire about replacement parts, please contact the distributor or store that the product was purchased through. To speed the information flow, please have the following information available:

- Model Number
- Serial Number
- Part Number and/or Description of the Part
- Quantity Needed

For further information about Monroe Truck Equipment replacement parts, please call 877-834-9049.

### **Return Policy**

Merchandise returned to Monroe Truck Equipment must have a Warranty Service Request (WSR) form filled out completely and signed by authorized personnel.

To get your WSR form for whole goods, call Snow & Ice Sales at 800-880-0109.

To get your WSR form for replacement parts, call Warranty at 877-834-9049..

All returned items are subject to a 15% restocking fee and *must be sent freight pre-paid*.

## 

Before working under the vehicle or around the spreader, shut off the truck engine and remove the key from the ignition. Prevent accidental startup and operation to avoid personal injury!

- Read all installation, safety and maintenance instructions completely before operating this equipment
- Keep all personnel clear of moving parts while equipment is being operated.
- Do not operate equipment in need of maintenance! Repair immediately!
- While operating this equipment, use common sense, use caution, be alert and be safety-conscious.

NOTE: Before installation of any hitch, or maintenance to hitch or truck, be sure to apply parking brake, chock the rear wheels and remove the key from the ignition switch.



## Safety Decal Signal Words





DANGER (*Red*) indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING (Orange) indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION (Yellow) indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION (Yellow) used without the safety risk alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

## 

Before working under the vehicle or around the spreader, shut off the truck engine and remove the key from the ignition. Prevent accidental startup and operation to avoid personal injury!

#### In Season:

- Check for loose bolts and nuts daily, and re-torque before use. (Failure to inspect equipment on a daily basis may seriously affect safety and/or efficiency.)
- Lubricate all grease fittings every ten hours of normal use and more frequently under heavy use. Locations are shown in parts breakdowns of specific models.
- Check all hydraulic fittings for tightness on a regular basis.
- Due to the nature of use and environment this equipment is operating in, damage and wear may occur at anytime. Therefore, Monroe Truck Equipment recommends the end user establish and follow a daily inspection routine before using this hitch.

#### **Off Season: (If Applicable)**

- Use care when disconnecting hydraulic lines to assure that no dirt or foreign objects enter the hydraulic system. Use caps to cover hydraulic hose fittings and insert plugs into hydraulic ports.
- Hydraulic cylinders should be fully retracted when stored during the off season to prevent damage or corrosion. The remaining exposed shaft surface should be coated with a thick grease to prevent corrosion, which must be removed before returning to regular service.
- Check mounting bolts for wear and/or damaged threads and replace before re-mounting.
- Lubricate all grease fittings and pivot points prior to storage.

SIZE	SIZE GRADE 2 GRADE 5		GRADE 8
1/4-20	50 IN-LBS	75 IN-LBS	9 FT-LBS
3/8-16	15 FT-LBS	23 FT-LBS	35 FT-LBS
1/2-13	35 FT-LBS	55 FT-LBS	80 FT-LBS
5/8-11	75 FT-LBS	110 FT-LBS	170 FT-LBS
3/4-10	130 FT-LBS	200 FT-LBS	280 FT-LBS
1-8	190 FT-LBS	480 FT-LBS	680 FT-LBS
1 1/4-7	380 FT-LBS	840 FT-LBS	1,360 FT-LBS

### **Torque Chart**



Installation of a manifold and quick connect fittings is recommended for easy removal of hitch.

### **Truck Requirements**

- The truck intended for use with this Monroe Hitch must have an extended frame to allow space for front mounted hydraulic pump (if required), hitch mounting plates etc.
   Frame extensions should be as thick as the truck frame and welded in place. They should extend approximately 18" - 22" from the front of the truck and can be trimmed if there is any excess.
- Spring modification and/or airbags may be required to carry additional weight (not included). Options should be considered and any parts needed should be purchased prior to installation of hitch.
- GVW and application must be considered prior to hitch installation.

These mounting instructions are intended as a guide to aid you in the installation of your **Monroe Hitch**. All dimensions noted in the instructions are approximate and may vary due to: make and model of chassis, tire size, type of suspension, customer preference, and interference caused by immovable attachments. **Monroe Truck Equipment** assumes no responsibility for improper installation, unless installed at a **Monroe Truck Equipment** location. Mounting location should be discussed by the end-user and the installer prior to installation in order to achieve the best possible installation.

#### **\*\*NOTE:** Hitch mounting height is determined by plow push height.

1. Remove Front Bumper from truck.

2. Cover the cab with a fire resistant tarp to protect it from sparks. If needed, trim the front of the truck frame to keep the hitch close to the truck and/or hydraulic pump. Use a cutting torch and keep the cut as square as possible. Clean all rough edges with a grinder.

- 3. If a Monroe brace kit is used: Clamp the mounting angle <sup>3</sup>/<sub>2</sub>" x 4" x 6" x 37" provided to the truck frame and measure to check for squareness.
- 4. Clamp mounting plates to each side of the frame so that they match up to the mounting angle. Tack weld the mounting plates to the mounting angle. (**Fig. 1**) Mounting plates are not included with hitch or brace kit. ½" plate is suggested.
- 5. Drill (4)<sup>17</sup>/<sub>32</sub>" holes or (3)<sup>21</sup>/<sub>22</sub>" holes through tow hooks (if required), mounting plates and truck frame. **(Fig. 1) NOTE** ---*Apply rust inhibitor or paint to drilled holes*.
- 6. Using a proper lifting device, lift the hitch to the correct height determined by push height of plow and clamp it to the mounting angle. Recheck the height on both sides of the hitch. **NOTE** ---Be sure to center and level the hitch to the truck frame and not to the ground.





Fig. 1

Fig. 2

- 7. If a tilting hitch is being installed, wedge a screwdriver on one side between the fixed portion of the hitch and the tilting portion. This will ensure clearance between the two portions and allow proper function of the hitch. (Fig. 2) Maintain a <sup>1</sup>/<sub>8</sub>" gap between portions.
- 8. Tack weld the hitch to the mounting angle and recheck all measurements before welding. **NOTE**---Be sure surfaces being welded are cleaned of paint, grease and dirt.
- 9. Remove the hitch and mounting assembly and weld. Mounting plates are not welded on the inside.
- Re-install hitch assembly and tow hooks. Tighten all bolts to specifications. (Fig. 3)
   NOTE ----Always use grade 8 bolts and nuts and hardened washers when fastening to a truck frame.
- 11. If installing a tilting hitch (sometimes the hood has to be tied back some so hitch is not so heavy to tilt), tilt engine hood forward and determine the amount of clearance needed between the hood and the hitch. Weld a short piece of heavy duty %" chain (6-10 links) (Not Furnished) to the fixed portion of the hitch and a ½" bolt to the tilting section. Fasten the chain with a washer and nut. (Fig. 4)
- 12. Coat the tilting pins with thin layer of anti-seize lubricant.
- 13. Cut the center section out of the front bumper. The amount removed should be equal to the width of the hitch mounting plates. Attach the two bumpers to the hitch and tack weld them in place, or fabricate mounting brackets. Check measurements and appearance. The bumper should be level to the truck frame, not the ground. When satisfied with fit weld or bolt the bumper sections in place. (Fig. 5 & 6)
- 14. Touch up with paint.









Fig. 5

Fig. 6

- 1. Chock the rear wheels and lift the front wheels with a floor jack. Place two heavy duty jack stands under the front axle and remove the front wheels.
- 2. To ensure proper placement of the frame mounting angles, measure from the outside of the truck frame to the inside of the suspension U-bolts. Add 1½" to that measurement. This allows clearance between the U-bolts and the frame mounts. Fit provided mounting angles together as shown in the following diagram and weld completely.



- 3. Clamp the frame mounting angles to the frame above the front axle. Angles must be located equal on both sides. Drill (3)<sup>2</sup>/<sub>32</sub>" holes through each frame mounting angles and the truck frame. Some notching of the mounting angles may be needed to allow air or brake lines to pass through the frame. Hole location may depend on the shape of the mounting angles after notching.
  NOTE --When drilling use caution to avoid any hydraulic, air or brake lines on the inside of the truck frame. Apply rust inhibitor or paint to drilled holes.
- Attach each frame mounting angle to the truck frame using a minimum of (3) <sup>5</sup>/<sub>8</sub>" bolts, (6) <sup>5</sup>/<sub>8</sub>" hardened washers and (3) <sup>5</sup>/<sub>8</sub>" toplock nuts, not provided. Tighten bolts just until snug.
   NOTE--The length of the bolts will depend upon the thickness of the frame and components.
- 5. Cut a radius and drill a <sup>13</sup>/<sub>16</sub>" hole at one end of the thrust arm bar. Clamp the other end to the frame mounting angles above front axle. Fasten rounded end of the thrust arm to plates to be welded onto hitch (not included). Tack weld thrust arm bars to mounting angles and connector plates to hitch. If a Husting Hitch is being installed a pusher angle (this angle should be used on most hitches with pusharms), ½" x 3" x 4" x 37" L (not included, may vary) must be welded on to the hitch.
- 6. Disassemble and weld complete. **NOTE** -- Cross bracing and/or bar reinforcement may be required for service (not included) only with side plates.
- 7. Touch up pusharm assembly with paint and re-install on the truck. Tighten all bolts to specifications.
- 8. Put the wheels back on the truck and remove the jack stands and the rear wheel chocks. Torque wheels to spec.

#### \*See page 62 for reference\*

### **Installation Instructions for Universal Side Plates**

- 1. Remove the key from the ignition switch, chock the rear wheels and lift the front wheels with a floor jack. Place two heavy duty jack stands under the front axle and remove the front wheels.
- 2. To ensure proper placement of the frame mounting angles, measure from the outside of the truck frame to the inside of the suspension U-bolts. Add 1½" to that measurement. This allows clearance between the U-bolts and the frame mounts. Fit provided mounting angles together as shown in the following diagram and weld completely.



- 3. Clamp the frame mounting angles to the frame above the front axle. Angles must be located equal on both sides. Drill (3) <sup>2</sup>/<sub>32</sub>" holes through the frame mounting angles and the truck frame. Some notching of the mounting angles may be needed to allow air or brake lines to pass through the frame. Hole location may depend on the shape of the mounting angles after notching. NOTE -- When drilling use caution to avoid any hydraulic, air or brake lines on the inside of the truck frame. Apply rust inhibitor or paint to drilled holes.
- Attach frame mounting angles to the truck frame using (3) %" bolts, (6) %" hardened washers and (3) %" toplock nuts (not included). Tighten bolts just until snug. NOTE--The length of the bolts will depend upon the thickness of the frame and components.
- 5. Measure from the rear of the frame mounting angles to the side plate mounting holes located at the bottom of the hitch. Some trimming of the side plates may be necessary to obtain a proper fit. Allow the side plate to extend past the mounting holes 2" --3". NOTE -- Always trim the side plate from the square end and re-drill any holes needed. -- The side plates can be welded or bolted to the frame mounting angles.
- 6. Position each side plate as it will be installed on the truck and clamp in place. Some trimming of the side plates may be needed to ensure clearance of the suspension, cross member, etc. Re-install side plates and recheck clearance.
- 7. Fasten the side plate to the hitch and tack weld, or bolt, the side plate to the mounting angles once they are in the proper position. Tack weld a shear bar (½" x 1" x 6" Bar) to each side plate directly behind the hitch mount plate. Remove the side plate and weld completely, omitting the front side of the reinforcing bar. NOTE -- Cross bracing and/or reinforcing bars may be needed for sever service (not included).

### **Installation Instructions for Universal Side Plates**

- 8. Touch up the side plate with paint and re-install on the truck. Tighten all bolts to specifications.
- 9. Side plates that are designed to attach to the outside of the truck frame are bolted directly to the hitch and truck frame. Some notching of the plates may be necessary to avoid the truck suspension or any components already attached to the truck frame. NOTE -- Cross bracing and/or reinforcing bars may be needed for severe service (not included).
- Clamp side plates in place and drill holes as needed. Note - Apply rust inhibitor or paint to drilled holes.
- 11. Tighten all bolts to specifications.
- 12. Put the wheels back on the truck, remove the jack stands and the rear wheel chocks. Torque to spec.



A UBA hitch assembly attaches directly to the vehicle frame and the front axle. The lower assembly takes place of side plates or pusharms.

To install a UBA hitch:

- 1. Remove front bumper from truck.
- 2. Cover the cab with a fire resistant tarp to protect it from sparks. If needed, trim the front of the truck frame to keep the hitch close to the truck and/or hydraulic pump. Use a cutting torch and keep the cut as square as possible. Clean all rough edges with a grinder.
- 3. If a Monroe brace kit is used; clamp the mounting angle ¾ x 4 x 6 x 37" provided to the truck frame and measure to check for squareness.
- Clamp mounting plates to each side of the frame so that they match up to the mounting angle. Tack weld the mounting plates to the mounting angle. (Fig. 1) Page 8 Mounting plates are not included with hitch. ½" plate is suggested.
- 5. Drill (4) <sup>1</sup>/<sub>32</sub>" holes or (3) <sup>2</sup>/<sub>32</sub>" holes through tow hooks (if required), mounting plates and truck frame. **(Fig. 1) Page 8 NOTE** --- Apply rust inhibitor or paint to drilled holes
- 6. Assemble the entire hitch assembly and attach it to the hitch mounting bracket and the front axle.
- 7. If a UBA hitch with axle bracket assembly (00025299, Page 53) is being installed be sure the axle bracket is installed correctly and tack weld the bracket together. Remove the bracket assembly from the front axle and weld. Touch up with paint and re-install.
- 8. If a UBA hitch with axle bracket assembly (00049015, Page 52) is being installed tighten the nuts on the assembly.
- 9. Tighten all bolts to specifications.
- 10. Cut the center section out of the front bumper. The amount removed should be equal to the width of the hitch mounting plates. Attach the two bumpers to the hitch and tack weld them in place. Check measurements and appearance. The bumper should be level to the truck frame, not the ground. When satisfied with fit, weld or bolt the bumper section in place. (Fig. 5 & 6, Page 10)
  - 11. Touch up with paint.

**NOTE** -- Cross bracing and/or reinforcing bars may be needed for severe service (not included).



	00012678 MC2075 HITCH ASSEMBLY, (SHOWN)			
Item	Qty.	Part Number	Description	
1	1	00023418	LIFT ARM ASSEMBLY See Page 17	
2	1	00023419	HITCH MOUNTING BRACKET ASSEMBLY See Page 17	
3	1	00023452	RECEIVER/HITCH WELDMENT	
4	1	05022142	PIN, ½" X 3", BENT, ZINC	
5	1	00021311	HANDLE	
6	3	05010692	BOLT, ½"-13 X 1¾", G8, HHCS, ZINC	
7	1	00021310	BRACKET LINKAGE	
8	1	00021304	PIN WELDMENT, LOCKING	
9	3	05020847	NUT, ½"-13, GC, TOP LOCK, C&W	
10	1	05022000	PIN, 1" X 3½", BUTTON HEAD, ZINC	
11	2	05022019	PIN, ¾″ X 2″, COTTER	



	00012215 MC2075, GLED 36 HITCH ASSEMBLY			
Item	Qty.	Part Number	Description	
1	1	00023418	LIFT ARM ASSEMBLY See Page 17	
2	1	00081347	HITCH WELDMENT, TP, GLED 36, MC2075	
3	1	05022142	PIN, ½" X 3", BENT, ZINC	
4	1	00021311	HANDLE	
5	3	05010692	BOLT, ½"-13 X 1¾", G8, HHCS, ZINC	
6	1	00021310	BRACKET LINKAGE	
7	1	00021304	PIN WELDMENT, LOCKING	
8	3	05020847	NUT, ½"-13, GC, TOP LOCK, C&W	
9	1	05022000	PIN, 1" X 3½", BUTTON HEAD, ZINC	
10	2	05022019	PIN, ¾6″ X 2″, COTTER	



#### 00023418 LIFT ARM ASSEMBLY

Item	Qty.	Part Number	Description
1	1	00021324	WELDMENT, INNER TUBE
2	1	05022077	PIN, 1" X 4½", BUTTON HEAD, ZINC
3	1	00021323	LIFT ARM WELDMENT
4	1	00023415	LIFT ARM PIN
5	1	05022019	PIN, ¾6″ X 2″, COTTER
6	2	05022006	PIN, ¼" X 2", COTTER
7	1	05022000	PIN, 1 X 4.5" BUTTON HEAD, ZINC



	00023419 HITCH MOUNTING BRACKET ASSEMBLY, UBF			
Item	Qty.	Part Number	Description	
1	1	00021328	HITCH MOUNTING BRACKET WELDMENT	
2	4	05022051	PIN, 1" X 3¼", FLAT HEAD	
3	4	05022019	PIN, ¾6″ X 2″, COTTER	



	00023329 MC2075 HITCH ASSEMBLY			
Item	Qty.	Part Number	Description	
1	1	00124797	HITCH WELDMENT, TP, GLED, MC2075	
2	1	00126778	LIFT ARM ASSEMBLY, HITCH, TP, MC2075 See Page 23	
3	2	05010818	BOLT, 1-8 X 4", G8, HHCS, ZC	
4	2	05020834	NUT, 1-8, GC, TOPLOCK, C&W	
5	1	05022000	PIN, 1" X 3½", ROUND HEAD, ZC	
6	1	05022019	PIN, ¾6″ X 2″, COTTER	
7	1	00021304	PIN WELDMENT, LOCKING, HITCH	
8	1	00021310	BRACKET, LINKAGE, HITCH	
9	1	00021311	HANDLE, HITCH	
10	3	05010692	BOLT, ½-13 X 1¾", G8, HHCS, ZC	
11	3	05020847	NUT, ½-13, GC, TOPLOCK, C&W	
12	1	05022142	PIN, BENT, ½" X 3" SHANK LENGTH	
13	1	00126781	Mounting bracket, stop, cylinder	
14	1	RB0037	BUMPER, RUBBER, 2½" DIA.	
15	3	05010594	BOLT, ¼-20 X 1¼″, G8, HHCS, ZC	
16	3	05021305	WASHER, ¼", FLAT, ZC	
17	3	05020536	NUT, ¼-20, G2, NYLON LOCK, ZC	



00011293 HITCH,TP,GLED 36,MC 2075,FFLA					
ltem	Qty.	Part Number	Description		
1	1	00125117	HITCH WLDMT,TP,GLED 36,MC2075,FFLA		
2	1	00125211	LIFT ARM ASSY, HITCH, FFLA See Page 20		
3	1	05022142	PIN .5 x 3 BENT ZC,INC:BRIDEGE PIN		
4	1	00021311	HANDLE,HITCH,MC801		
5	3	05010692	BOLT .500-13 x 1.75 G8 HHCS ZC		
6	1	00021310	BRACKET,LINKAGE,HITCH,MC801		
7	1	00021304	PIN WLDMT,LOCKING,HITCH,MC801		
8	3	05020847	NUT .500-13 GC TOPLOCK C&W		
9	1	05022000	PIN 1.00 x 3.50 ROUND HEAD ZC		
10	1	05022019	PIN .188 x 2.00 COTTER		
11	1	TS9	MISC, STRAP TARP 9"		
12	2	9225	MISC, HOOK TARP "S"		



		00125211 LI	FT ARM ASSEMBLY, HITCH, FFLA
ltem	Qty.	Part Number	Description
1	1	00110837	PIVOT ROD,LIFT ARM,HITCH,STD
2	2	05022019	PIN .188 x 2.00 COTTER
3	1	00125212	LIFT ARM WLDMT,UPPER,FFLA
4	1	05022000	PIN 1.00 x 3.50 ROUND HEAD ZC
5	1	05022077	PIN 1.0 x 4.5,ZINC
6	1	00125795	LIFT ARM WLDMT,HITCH,INNER,FFLA
7	2	05022031	PIN .188 x 2.50 COTTER
8	2	05050288	GREASE ZERK, 250-28 STRAIGHT



	00112372 HITCH, TP, GLED, 36, FFLA				
Item	Qty.	Part Number	Description		
1	1	00112373	HITCH WELDMENT, TP, GLED, 36, FFLA		
2	1	00021304	PIN WELDMENT, LOCKING, HITCH, MC801		
3	1	00133394	LOCK, LIFT ARM, HITCH, OFFSET		
4	1	00105317	HANDLE, HITCH, GLED, MILWAUKEE		
5	1	00133356	LIFT ARM ASSEMBLY, HITCH, OFFSET	See Page 22	
6	3	05010693	BOLT, .5-13 X 2, G8, HHCS, ZINC		
7	3	05020847	NUT, .5-13, GC, TOP LOCK, C&W		
8	2	05022051	PIN, 1 X 3.25, FLAT, HEAD		
9	1	05022142	PIN, BENT, .5 X 3 SHANK LNGTH		
10	1	00112377	LINKAGE, PIN, HITCH, GLED		
11	3	05022019	PIN, .188 X 2 COTTER		
12	1	05022000	PIN, 1 X 3.5 ROUND HEAD, ZINC		
13	2	05022163	PIN, HITCH, 1 DIA X 5.75, LONG		
14	1	00105319	CYLINDER, 4 X 10 DA, NITRIDED ROD	See Page 46	
15	1	05090296	MANUAL, HITCH, GLED QUICK LINK		



	00133356 LIFT ARM ASSEMBLY, HITCH, OFFSET			
Item	Qty.	Part Number	Description	
1	1	00133355	LIFT ARM WELDMENT, HITCH, OFFSET	
2	1	00128040	LIFT ARM WELDMENT, HITCH, INNER	
3	1	05022077	PIN, 1 X 4.50, ZINC	
4	1	05022019	PIN, .188 X 2, COTTER	



	00126778 LIFT ARM ASSEMBLY			
Item	Qty.	Part Number	Description	
1	1	00125300	LIFT ARM WELDMENT, OUTER, HITCH,TP	
2	1	00128040	LIFT ARM WELDMENT, INNER, HITCH	
3	1	05022000	PIN, 1" X 3½", ROUND HEAD, ZC	
4	1	05022077	PIN, 1" DIA. X 5¼", ZC	
5	1	05022019	PIN, ¾6″ X 2″, COTTER	
6	1	05022106	PIN, ¾6″, LYNCH	
7	2	RB0037	BUMPER, RUBBER, 21/2" DIA.	
8	2	05010594	BOLT, ¼-20 X 1¼″, G8, HHCS, ZC	
9	2	05020536	NUT, ¼-20, G2, NYLON LOCK, ZC	
10	2	05021305	WASHER, ¼", FLAT, ZC	





	02140601 MC801 HITCH RECEIVER ASSEMBLY				
Item	Qty.	Part Number Description			
1	1	00021366 RECEIVER WELDMENT			
2	1	00021310 LINKAGE BRACKET			
3	1	00021311 HANDLE, LATCH			
4	1	05022142 PIN, ½" X 3" SHANK LENGTH, BENT, ZINC			
5	3	05010692 BOLT, ½"-13 X 1¾", G8, HHCS, ZINC			
6	3	05020847 NUT, ½"-13, TOP LOCK, C&W			
7	1	00021304 PIN WELDMENT			
8	2	00080246 PIN, 1¼" X 6¼", T-BAR, HITCH			
9	2	05022106 PIN, ¾", LYNCH			
10	14	00086199 SPACER, MC801 (NOT SHOWN)			



	00023427 SWIVEL PLATE ASSEMBLY, GLED LOOP			
Item	Qty.	Part Number	Description	
1	1	00023420	SWIVEL PLATE WELDMENT	
2	1	05010853	BOLT, 1¼"-7 X 4½", G5, ZINC	
3	1	05020835	NUT, 1¼″-7, GC, TOP LOCK, C&W	

#### 00023428 SWIVEL PLATE WELDMENT









#### Item Qty. **Part Number Description** HITCH WELDMENT LIFT ARM ASSEMBLY LOCKING DOG WELDMENT PIN, 1" X 3½", BUTTON HEAD, ZINC PIN, 3/6" X 1.5" COTTER ARM, LOCKING, RECEIVER LINKAGE ARM PIN, 3/4" X 51/2", LOCKING FITTING, ¼", GREASE, STRAIGHT PIN, ¼" X 1", ROLL, SPRING, LOCK SPRING, COMPRESSION, LEVER SPRING, EXTENSION, JAW SPRING, EXTENSION, LEVER LOCK WASHER, ½", FLAT, ZINC PIN, 1" X 2¾", CLEVIS NUT, ½"-13, GC, TOP LOCK, C&W PIN, 1 DIA X 6 RD HD ZINC PIN, .188 X 2.50 COTTER BOLT, 5/6"-18 X 1", G8, HHCS, ZINC NUT, 5/6"-18, GC, TOP LOCK, C&W SAFETY LATCH BOLT, 3/8-16 X 2, G8, HHCS, ZINC

#### 01141500 QL-PF91 HITCH ASSEMBLY



		00052633 H	ITCH,TP,QL,PF91,MC7082FFLA,1x5BAR
ltem	Qty.	Part Number	Description
1	1	00125126	HITCH WLDMT,TP,MC7082FFLA,1x5
2	1	00125128	HITCH WLDMT,TP,QL,MC7082FFLA
3	1	00052527	LIFT ARM ASSY, HITCH, OFFSET See Page 29
4	1	00087241	MTG ANGLE,HITCH,MC7082,RH
5	1	00087242	MTG ANGLE,HITCH,MC7082,LH
6	2	00141752	PIN,MTG,RDS,W/T-HANDLE,ZC
7	2	05022106	PIN .188 LYNCH
8	2	05010850	BOLT 1.25-7 x 3.50 G8 HHCS ZC
9	2	05020835	NUT 1.25-7 GC TOPLOCK C&W
10	1	00110887	CHAIN,HIGH TEST,GR43,.375,7 LINKS
11	2	05010645	BOLT .375-16 x 1.50 G8 HHCS ZC
12	3	05020898	NUT .375-16 GC TOPLOCK C&W
13	2	05021307	WASHER .375 FLAT ZC
14	1	05022000	PIN 1.00 x 3.50 ROUND HEAD ZC
15	1	05022019	PIN .188 x 2.00 COTTER
16	1	TS9	MISC, STRAP TARP 9"
17	2	9225	MISC, HOOK TARP "S"
18	1	00046843	ARM,LOCKING
19	2	00099325	LOCK DOG WLDMT,HITCH,PF91
20	2	00039041	LINKAGE ARM
21	2	05022116	LOCKING ARM
22	1	00099322	SAFETY LATCH,HITCH,PF91
23	2	05035047	SPRING, EXTENSION, PF91, JAW
24	1	05035076	SPRING,EXT,NEW STYLE HD,PF91
25	1	05035048	SPRING,COMPRESSION
26	2	05050288	GREASE FITTING, 250 SELF TAPPING
27	2	05022151	PIN .250 x 1.0 ROLL SPRING LOCK
28	4	05021309	WASHER .500 FLAT ZC
29	1	05020268	NUT .500-13 G8 HEX ZC
30	2	05022115	PIN 1.0 x 2.750 CLEVIS
31	2	05022100	PIN .188 x 1.50 COTTER
32	2	05010618	BOLT .313-18 x 1.00 G8 HHCS
33	2	05020909	NUT .313-18 G8 HEX ZC
34	1	05010647	BOLT .375-16 x 2.00 G8 HHCS



	00052527 LIFT ARM ASSEMBLY, HITCH, OFFSET				
ltem	Qty.	Part Number	Description		
1	1	00052528	LIFT ARM WLDMT,HITCH,OFFSET,		
2	1	00052536	LIFT ARM WLDMT,HITCH,OFFSET,		
3	1	00110837	PIVOT ROD,LIFT ARM,HITCH,STD		
4	1	05022000	PIN 1.00 x 3.50 ROUND HEAD ZC		
5	1	05022077	PIN,1.000 DIA x 4.144 GL,ZC PL		
6	2	05022019	PIN .188 x 2.000 COTTER		
7	2	05050288	GREASE FITTING, .250-28 UNF ST		
8	1	05010597	BOLT .250-20 x 2.00 G8 HHCS ZC		
9	1	05020899	NUT .250-20 GC TOPLOCK C&W		
10	1	05022031	PIN .188 x 2.500 COTTER		





00038292 HITCH, TP, PIN, 33.5, MC5033				
Item	Qty.	Part Number Description		
1	1	00073127 HITCH WELDMENT		
2	1	05010853 BOLT, 1¼"-7 X 4½", G8, HHCS, ZINC		
3	1	05020835 NUT, 1¼"-7, GC, TOP LOCK, C&W		



	00039999 HITCH, SWIVEL PLATE, A-FRAME				
Item	Qty.	Part Number	Description		
1	1	01141504	HITCH, PLOW, BAKER, FLINK		
2	1	05010853	BOLT, 1¼"-7 X 4½", G8, HHCS, ZINC		
3	1	05020835	NUT, 1¼″-7, GC, TOP LOCK, C&W		



	00029079 HITCH, TP, Q, ARROW, MC9001					
Item	Qty.	y. Part Number Description				
1	1	00029080	HITCH WELDMENT, TP, Q			
2	1	00097942	LEVER WELDMENT			
3	2	00038261	PIN WELDMENT			
4	2	00097943	JAW WELDMENT			
5	2	00097945	LINKAGE ARM			
6	2	05035045	EXTENSION SPRING			
7	4	05035049	COMPRESSION SPRING			
8	4	05022021	PIN, ¼ X 1, COTTER			
9	2	05022019	PIN, ¾6″ X 2, COTTER			



	00029086 HITCH, TP, Q, ARROW, MC7500			
Item	Qty.	Part Number Description		
1	1	00029087 HITCH WELDMENT		
2	1	00061370 LIFT ARM ASSEMBLY See Page 34		
3	2	00077670 SIDE PLATE		
4	1	05022000 PIN, 1 X 3½, BUTTON HEAD, ZINC		
5	1	05022019 PIN, .188 X 2, COTTER		
6	16	05010764 BOLT, ¾-10 X 2, G8, HHCS, ZINC		
7	16	05020849 NUT, ¾-10, GC, TOP LOCK, C&W		
8	16	05021312 WASHER, ¾, FLAT, ZINC		





		00061370	LIFT ARM ASSEMBLY, HITCH, MC7511, 99
Item	Qty.	Part Number	Description
1	1	00061372	LIFT ARM WELDMENT
2	1	00061373	PIN, LIFT ARM
3	3	05022019	PIN,.188 X 2, COTTER
4	1	05022000	PIN, 1 X 3.5, BUTTON HEAD, ZINC
5	1	05022067	PIN, 1.25 X 4.50, FLAT, HEAD, ZINC
6	1	05022006	PIN, .250 X 2, COTTER
7	1	00028576	KEYHOLE PLATE WELDMENT, HITCH, AIRPORT



	00029084 HITCH, TP, Q, ARROW, MTQ8000				
Item	Qty.	Part Number	Description		
1	1	00029085	HITCH WELDMENT		
2	1	01311612	LIFT ARM WELDMENT		
3	2	01311604	BRACKET, SIDE PLATE		
4	2	01311600	LIFT ARM BLOCK		
5	1	00011514	CHAIN BLOCK ASSEMBLY, TRIPLE KEY		
6	1	00039016	MOUNTING ANGLE, RH		
7	1	01311609	MOUNTING ANGLE, LH		
8	2	00014186	FRAME CLIP		
9	1	00096666	CROSS TUBE WELDMENT		
10	1	00014183	SIDE PLATE WELDMENT, RH		
11	1	00014184	SIDE PLATE WELDMENT, LH		
12	1	05022051	PIN, 1 X 3¼, FLAT, HEAD		
13	2	05050288	GREASE ZERK, ¼-28, STRAIGHT THREADED		
14	2	05022000	PIN, 1 X 3½, BUTTON HEAD, ZINC		
15	3	05022019	PIN, .188 X 2, COTTER		
16	4	05010738	BOLT, %-11 X 1¾, G8, HHCS, ZINC		
17	4	05010739	BOLT, %-11 X 2, G8, HHCS, ZINC		
18	6	05010742	BOLT, %-11 X 2¾, G8, HHCS, ZINC		
19	14	05020837	NUT, <sup>5</sup> / <sub>8</sub> -11, GC, TOP LOCK, C&W		
20	8	05010768	BOLT, ¾-10 X 3, G8, HHCS, ZINC		
21	8	05020849	NUT, ¾-10, GC, TOP LOCK, C&W		




	00029088 HITCH, TP, Q, ARROW, MTQ8000									
Item	Qty.	Part Number	Part Number Description							
1	1	00029089	HITCH WELDMENT							
2	2	01311604	BRACKET, SIDE PLATE							
3	2	01311600	LIFT ARM BLOCK							
4	1	01311612	01311612 LIFT ARM WELDMENT							
5	2	05050288	GREASE ZERK, ¼-28, STRAIGHT THREADED							
6	1	00011514	CHAIN BLOCK ASSEMBLY, TRIPLE KEY							
7	2	05022000	PIN, 1 X 3½, BUTTON HEAD, ZINC							
8	1	02211610	CYLINDER MOUNT PIN							
9	14	05010743	BOLT, %-11 X 3, G8, HHCS, ZINC							
10	14	05020270	NUT, %-11, G8, HEX, ZINC							
11	4	05022019	PIN, .188 X 2, COTTER							
12	1	01311605	CROSS TUBE WELDMENT							



	00029090 HITCH, TP, Q, ARROW, MC9001								
Item	Item Qty. Part Number Description								
1	1	00029080	HITCH WELDMENT						
2	1	00029091	LEVER WELDMENT						
3	2	00038261	PIN WELDMENT						
4	2	00097943	JAW WELDMENT						
5	2	00097945	LINKAGE ARM						
6	2	05035045	extension spring						
7	4	05035049	COMPRESSION SPRING						
8	4	05022021	PIN, ¼ X 1, COTTER						
9	2	05022019	PIN, .188 X 2, COTTER						



	00039953 RECEIVER ASSEMBLY						
Item	Qty.	Part Number	Description				
1	1	00025268	SP-TOR-LOC WELDMENT				
2	1	00039954	RECEIVER WELDMENT				
3	2	00031699	PIN, GRAPPLE, 1¼″ DIA X 7¾″				
4	2	05022126	PIN, ROLL, ¼″ X 1½″				

# 00039927 HITCH, PLOW WELDMENT, RECEIVER MC9000





	02140100 ARM, MC50 THRUST KIT								
Item	Item Qty. Part Number Description								
1	2	00031773	ANGLE, 6″ X 4″ X ½″ X 8″						
2	2	00039993-B	ANGLE, 4" X 3" X ½" X 8", MS PAINTED						
3	2	00039994	BAR, 1″ X 4″ X 48″						
4	1	00012323	ANGLE, 6″ X 4″ X ¾″ X 37″						



00031770 Side Plate, LH

00031771 Side Plate, RH

	01143100 SIDE PLATE KIT, UNIVERSAL EXT							
Item Qty. Part Number Description								
1	1	00031770	SIDE PLATE WELDMENT, LH					
2	1	00031771	SIDE PLATE WELDMENT, RH					
3	1	00012323-A	ANGLE, 6" X 4" X ¾" X 48" (NOT SHOWN)					
4	2	00031773	ANGLE, 6" X 4" X ½" X 8" (NOT SHOWN)					
5	2	00031774	ANGLE, 6" X 4" X ½" X 6" (NOT SHOWN)					



00031768 Side Plate, LH

00031769 Side Plate, RH

	01143000 SIDE PLATE KIT, UNIVERSAL W/MTG								
Item	Item Qty. Part Number Description								
1	1	00031768	SIDE PLATE WELDMENT, LH						
2	1	00031769	SIDE PLATE WELDMENT, RH						
3	1	00031772	ANGLE, 6" X 4" X ¾" X 36" (NOT SHOWN)						
4	2	00031173	ANGLE, 6" X 4" X ½" X 8" (NOT SHOWN)						
5	2	00031774	ANGLE, 6" X 4" X ½" X 6" (NOT SHOWN)						

\*\*Side plates may require additional bracing/reinforcing for severe service (not included.)



00086428	HITCH	, PP	, WEDGE LOCK,	AQC
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Item	Qty.	Part Number	Description			
1	1	00087029	HITCH WELDMENT, PP, WEDGE LOCK			
2	1	00087027	LEVER HANDLE			
3	1	05035056	SPRING, EXTENSION, 1 OD X 6 OAL X .115 W-DIA			
4	1	00087031	CONTROL ROD			
5	1	00087030	HANDLE WELDMENT			
6	2	05050312	CLEVIS, ADJ END, ¾-10 UNC THREAD			
7	2	05022107	PIN, ¾ X 2‰, CLEVIS			
8	2	05022021	PIN, ¼ X 1, COTTER, ZINC			
9	2	05020123	NUT, ¾-10, G2, JAM, ZINC			
10	1	05010695	30LT, ½-13 X 2½, G8, HHCS, ZINC			
11	2	05021309	VASHER, ½ FLAT, ZINC			
12	2	05021367	WASHER, ½ LOCK, ZINC			
13	1	05010690	BOLT, ½-13 X 1¼, G8, HHCS, ZINC			
14	1	00087984	PIPE, ½ SCHED 89			
15	1	00087986	PIVOT WELDMENT			
16	1	00087985	ROD WELDMENT			
17	3	05105624	SCREW, %-24 X 1, SSS			
18	3	05020158	NUT, ¾-24, G2, JAM, ZINC			

### 00105319 CYLINDER, 4x10, DA, NITRIDED ROD

STROKE LIMITER INSTALLATION INTRUCTIONS

- 1) UNSCREW HEADSTOCK FROM CYLINDER BODY.REMOVE HEADSTOCK AND PISTON ROD ASSEMBLY.DO NOT REMOVE PISTON ROD FROM HEADSTOCK.
- 2) UNSCREW SLOTTED NUT, THEN REMOVE PISTON FROM PISTON ROD.
- 3) SINCE O-RING AND WASHER BACK-UP MAY BE DAMAGED DURING DISASSEMBLY.REPLACE O-RING AND WASHER THAT ARE ON HEADSTOCK WITH ITEM#4 O-RING AND ITEM#5 WASHER BACK-UP.
- 4) SLIDE ITEM#3 STROKE LIMITER ONTO PISTON ROD, BEING CAREFUL NOT TO MARR, SCRATCH OR NICK PISTON ROD.
  5) REASSEMBLE PARTS IN REVERSE ORDER.
  SLOTTED NUT
  SLOTTED NUT
  SLOTTED NUT
  STON
  SLOTTED NUT
  SLOTTED NUT



	PARTS LIST							
ITEM	QTY	PART NUMBER	DESCRIPTION					
1	1	00105320	EAR,MTG,1.063 DIA SLOT,.250THK					
2	1	05002953	CYLINDER,4x10 DA,NITRIDED ROD					
3	1	00106223	STROKE LIMITER,CYL,HITCH,MILW					
4	1	05002958	O-RING 4x8 CYL					
5	1	05002959	WASHER,BACK-UP 4X8 CYL					

BEST METAL	ITEM	QTY	PART #	DESCRIPTION
	1	1	N/A	JACKET ASSEMBLY
	2	1	N/A	ROD ASSEMBLY, NITROBAR
	3	1	N/A	LOCK NUT
	4	1	*	WEAR RING
	5	1	*	DYNAMIC SEAL
	6	1	*	O-RING
	7	1	*	Poly Pak
	8	1	*	O-RING
	9	1	*	ROD WIPER
	10	1	05003339	GLAND NUT
	11	1	05003340	PISTON, WEAR RING
			05003225	SEAL KIT (Includes all parts marked with a



# 05000017 CYLINDER, 3x10, SA, .75-16 ORB 18 PIN CENTERS

BEST METAL	ITEM	QTY	Part #	DESCRIPTION
	1	1		PISTON LOCK RING
	2	1		JACKET ASSEMBLY
	3	1		PISTON ROD ASSEMBLY
	4	1		O-RING
	5	1		Poly Pak
	6	1	05002938	GLAND NUT
	7	1		ROD WIPER
			05002920	SEAL KIT (Items 4-5 & 7)
				Prior to Feb 2003
			05003394	SEAL KIT After Feb 2003



# 05002615 CYLINDER, 4x10, SA, .75-16ORB 19 PIN CENTERS, PLOW LIFT

BEST METAL	ITEM	PART #	DESCRIPTION
	1	05002396	WEAR RING
	2		JACKET ASSEMBLY
	3		PISTON ROD ASSEMBLY
	4		O-RING
	5		BACKUP WASHER
	6	05002397	Poly Pak
	7	05003354	GLAND NUT
	8	05002389	ROD WIPER
		05002950	SEAL KIT



05002762 CYLINDER, 4x10, DA, NIT, .75 ORB, LIFT IN-LINE w/ PIN

BOBALEE	ITEM	QTY	PART #	DESCRIPTION
	1	1		LOCK NUT
	2	1	05000023	PISTON UNI
	3	1		CASE WELDMENT
	4	1		ROD
	5	1	05000026	HEAD
	6	2		PORT PLUG
	7			GREY PRIMER
	8			BLACK GLOSS
	9	1	05000021	SEAL KIT

# 05002829 CYLINDER, 3.5 x 24, DA

BOBALEE	ITEM	Part #	DESCRIPTION
	1		CASE WELDMENT
	2		ROD WELDMENT
	3	05002016	PISTON
	4	05003358	HEAD
	5		SPACER
	6		LOCK NUT
	14		PLUG
	15		BLACK GLOSS
	16	05003357	SEAL PACKING KIT
	17		GREY PRIMER







### 1051 West 7<sup>th</sup> Street Monroe, WI 53566 608-328-8127 ~ Fax: 608-328-4278

### W arranty Policy Uninstalled Parts and Equipment Provided by Monroe Truck Equipment

Monroe Truck Equipment will provide the following limited warrant for a period of one year to the original purchaser of all uninstalled goods provided by Monroe Truck Equipment:

LIMITED WARRANTY: All goods provided by Monroe Truck Equipment (MTE) will be free from defects in material and workmanship for a period of one year from the date of purchaseby the original purchaser. This limited warranty shall be the sole and exclusive remedy for any such product found to bedefective. This limited warranty supercedes all previous warranties and is exclusive and in lieu of all oher warranties, whether expressed or implied.

This limited warranty applies only to parts or accessories manufactured by MTE and/or provided by same. Except with respect to title, this limited warranty does not pertain to parts or accessories not manufactured and/or provided by MTE, regardless of whether such parts or accessories were selected and/or recommended by MTE. MTE will, as a service to the buyer, pass on any warranties received from the original manufacturer of MTE provided parts and/or accessories.

MTE will not under any circumstances be lable for any incidental or consequential damages whether in tort, contract, or otherwise, for any bodily injury, death, property damage, loss ofise, or loss of income resulting from or in any way arising cut of any goods provided by MTE, or their sale, use, or manufacture.

Any warranty claim deemed to be arising from the result of misuse, abuse, neglect, accident, improper installation, lack of maintenance, act of war (whether declared or otherwise), or act of God will be denied. Any re pair or modification by the buyer or any third party, without the prior written consent of MTE, will void any possible warranty compensation. Any damage deemed to be the result of abnormal operation will not be compensated by this warranty.

Normal or special maintenance items such as fuels, fluids, tiresbelts, hoses, filters, air cleaners, light bulbs, and any other items subject to normal wear and tear that are supplied in connection with goods provided by MTE are not allowed under this warranty.

All engines, pumps, cylinders, valves, and motors are warrantedby their manufacturer and not by Monroe Truck Equipment. The manufacturer's warranty will apply to these parts. Electrical and hydraulic components are not to be disassembled without the express written consent of MTE. Any disassembly of MTE provided components without prior authorization will void the applicable warranty.

Monroe Truck Equipment shall be the sole and final determining uthority as it applies to the administration of this warranty policy. Purchaser acknowledges receipt of Monroe Truck Equipment Warranty Policy and agrees to be bound by same.



### **GLOBAL SOLUTIONS**

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ARMORED VEHICLES ~ SPORT TRUCK CONVERSIONS MUNICIPAL SNOW & ICE CONTROL ~ FIRE APPARATUS PICKUP TRUCK ACCESSORIES ~ TRUCK EQUIPMENT/MODIFICATIONS







### 1051 West 7<sup>th</sup> Street Monroe, WI 53566 608-328-8127 ~ Fax: 608-328-4278

Any and all warranty claims must be forwarded to MTE within 10 days of defect discovery. A copy of the original Monroe Truck Equipment invoice as well as the manufacturer's model numberserial number, and date of installation must accompany all correspondence regarding said claims. MTEwill, at their option, choose whether to repair or replace the defective part unless otherwise specified by the original manufacturer of said part.

Procedures for Warranty Claims Notification

For submission of any warranty claim please contact Monroe Truck Equipment – Warranty Department at 800-356-8134

The following documentation will be needed when you call for initial warranty authorization:

- 1. A copy of the original MTE invoice.
- 2. Make, Model, and VIN or Serial Number of the equipment involved.
- 3. Part number and serial number of the part in question.
- 4. A complete description of the problem.

The following must accompany any claimusbmitted to Monroe Truck Equipment:

- 1. Documented photographs of any physical damage.
- 2. Inspection notes by MTE personnel or MTE authorized 3<sup>rd</sup> party.
- 3. Authorization number issued by MonroeTruck Equipment Warranty Department.

Defective parts must be returned to Monroe Truck Equipme nt (freight prepaid) within 30 days of issuance of Authorization Number.

Monroe Truck Equipment reserves the right to void any warrant y for failure to comply with Monroe Truck Equipment Warranty Policy.

This policy is effective October 11, 2012