

OWNER'S MANUAL



GP30 LOADERPARTS and INSTRUCTIONS

1242 ARIZONA AVE. LARCHWOOD, IA 51241 1-800-570-8205



TO PREVENT POSSIBLE ROLLOVER, OBSERVE THE FOLLOWING SAFETY PRECAUTIONS

- Carry loads as low as possible
- Drive tractor slowly when turning, operating on hills or inclines, or traversing uneven ground
- Raise load to full height *only* when tractor in on even ground and front wheels are straight ahead

TO PREVENT POSSIBLE PERSONAL INJURY, OBSERVE THE FOLLOW-ING SAFETY PRECAUTIONS

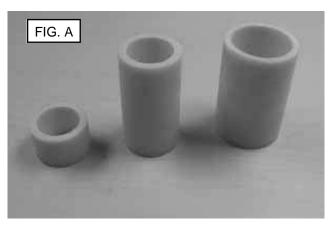
- Never walk or work under a raised loader that is not firmly supported
- Always relieve the hydraulic system to zero pressure before performing repairs on any component of the loader's hydraulic system

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SERIAL No. of Loader Purchased	
Date Purchased	

COMPOSITE BEARING INFORMATION



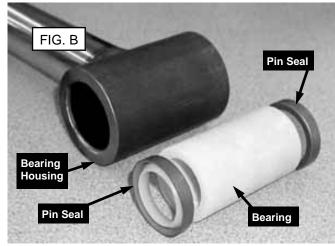


FIGURE A. Your GP/GL-Series loader is equipped with composite, greaseless bearings at all (12) pivot points. These high-quality bearings should not be confused with plastic bushings, sintered bushings, or metal-backed bearings. Composite bearings are made from an ultra-strong fiberglass composite that has twice the compressive yield strength of plain carbon steel. Their greaseless feature is due to a Teflon-impregnated liner that is interwoven to the bearing's inside diameter. The bearings are designed to last the life of the loader and the pins that rotate in the bearings should exhibit practically no wear.

FIGURE B. Even though the composite bearings on your GP/GL-Series loader have excellent resistance to dirt particles, the (4) pivot points on the bucket have an added feature. The two lower bucket cylinder pivots and the two mainframe-to-bucket pivots are equipped with pin seals on each end of the bearing housing. It is these four pivot points that are usually down in the dirt and grime, but with a GP/GL-Series loader, you won't have to worry about pin failures again!

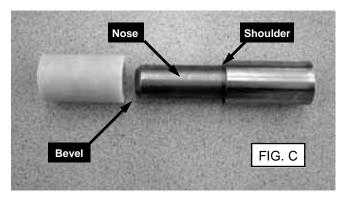


FIGURE C. Should any of your bearings have to be removed, this photo shows the tool that is available to remove and install the bearings properly. They are available for purchase, you just need to tell your dealer or Miller Loaders the model of loader you have. If you'd prefer to make your own, here are a few things to remember:

- The nose should be 1/4" longer than the bearing
- A 1/4" bevel on the end of the nose
- The shoulder must be just slightly smaller than the outside diameter of the bearing
- The diameter of the nose should be about 0.005 less than the inside diameter of the bearing

MOUNTING LOADER



STEP 1 For a new loader installation, the mountings must be installed on the tractor first. Refer to the typical mounting kit shown in Figure 1. A detailed schematic of your specific kit is available—just call 1-800-570-8205 if the schematic was not included with your new loader.

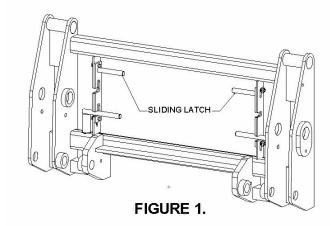
- STEP 2 The loader should have been dismounted (or assembled) on flat, level ground (see Figure 2).
- **STEP 3** Approach the loader as shown in Figure 3 and connect the hydraulics.
- **STEP 4** Once the hydraulics are functional, begin to slowly tip the bucket forward from its flat position, see Figure 4A. This will bring the upright masts of the loader towards the support shafts on the mountings (Fig. 4B). Figure 4C shows the mast completely seated on the support shaft. Once the mast is resting on the support shaft, the V-block will also be aligned with the tapered guide block. The lift cylinders can be used to rotate the upright mast and firmly seat the V-block against the guide block.
- **STEP 5** Using a 1-1/2" socket or end wrench, install and tighten the 1" retaining bolt that secures the V-block to the guide block. See Figure 5.
- **STEP 6** Raise the bucket off the ground so that the stand legs are hanging free. See Figure 6.
- **STEP 7** Return the stand legs to their stored position. See Figure 7.

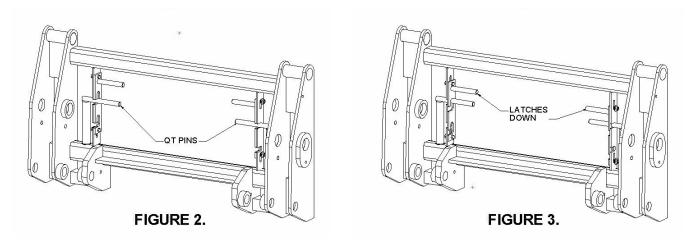
DISMOUNTING LOADER



- STEP 1 DRIVE THE TRACTOR ONTO FLAT CONCRETE and place the loader in the position shown in Fig 1.
- **STEP 2** Remove the stand legs from their stored position and place them in their dismount position. Slide the inner tubes down to the extended position and secure them with the 3/4" pins. See Fig. 2.
- **STEP 3** Gently lower the loader until the stand legs touch the ground. Please note that the stand legs are not designed to withstand all of the down-force that can be generated with the lift cylinders, they are designed to support the weight of the loader only. Rotate the bucket so that the cutting edge and stand legs are all resting on the ground. See Fig. 3.
- **STEP 4,5** Using a 1-1/2" socket or end wrench, remove the 1" retaining bolt that secures the V-block to the guide block. See Figures 4,5.
- **STEP 6** Using the bucket cylinders, slowly flatten the bucket. This will start to lift the upright mast out of the pillar mount, see Figure 6A. When the bucket is completely flat on the ground, the upright mast will be high enough to back away from the loader. See Figure 6B
- **STEP 7** Disconnect the hydraulic supply to the loader and slowly back away from the loader. See Figure 7.

QUICK-ATTACH INSTRUCTIONS



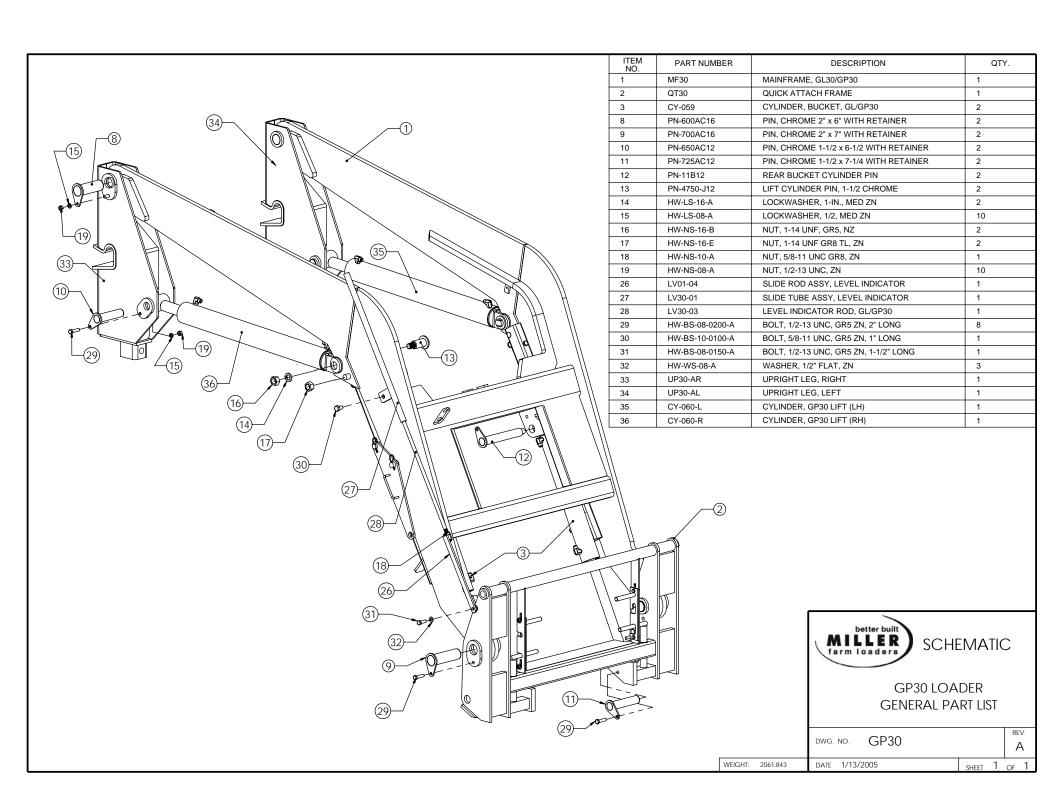


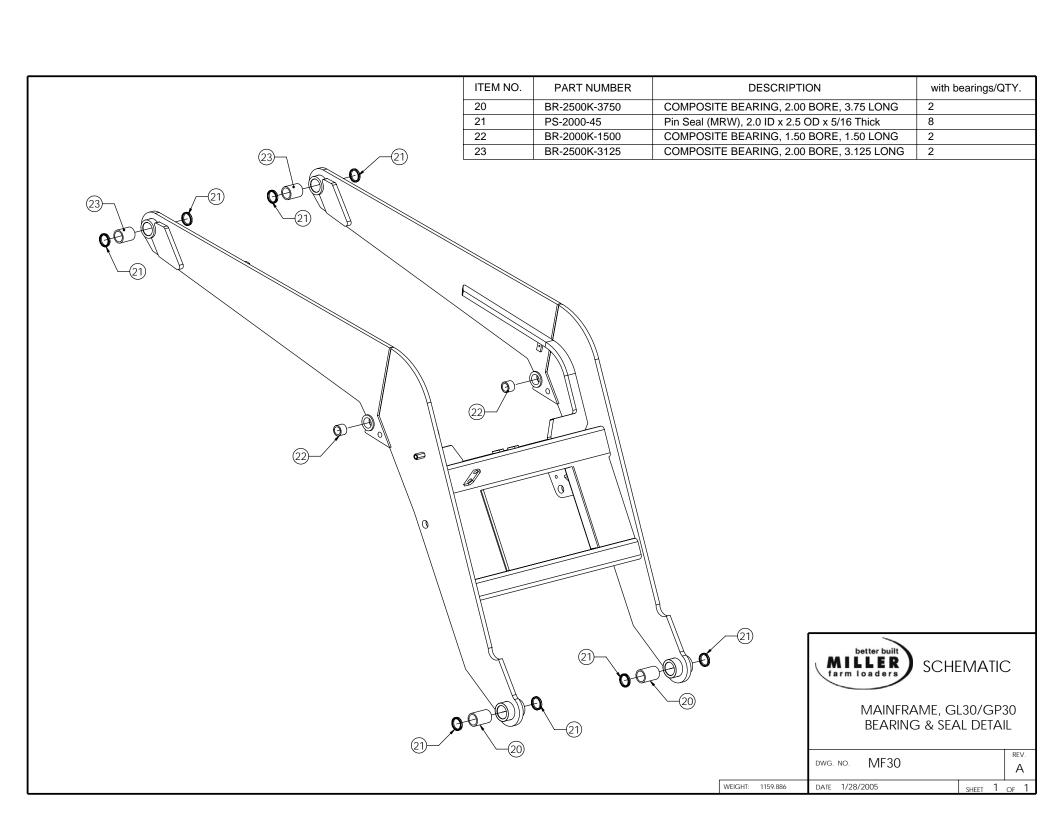
UNCOUPLING

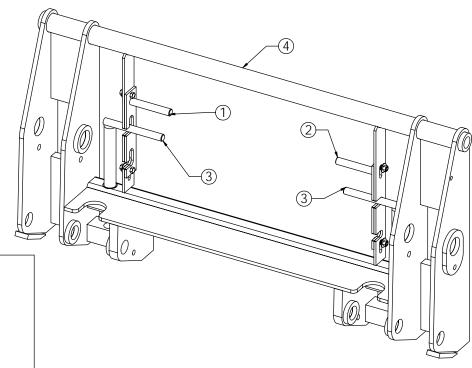
- 1. Raise sliding latches as shown in Figure 1.
- 2. Rotate QT pins out of the lower notches, raise, and then rotate them into the upper notches of the sliding latches as shown in Figure 2.
- 3. Slide the sliding latches down as shown in Figure 3. This secures the QT pins in the "up" position so they do not interfere when hooking up to the next attachment.

COUPLING

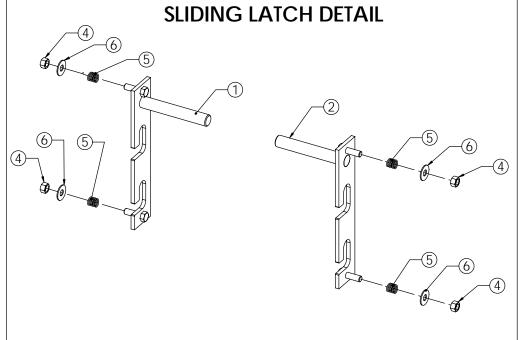
- 1. Approach and hook onto the attachment with QT pins secured in the "up" position as shown in Figure 3.
- 2. When the QT frame is flat against the attachment, raise the sliding latches as shown in Figure 2.
- 3. Rotate QT pins out of the upper notches, lower, and then rotate them into the lower notches on the sliding latches as shown in Figure 1. NOTE: If the QT pins do not easily slide thru the lug on the attachment, do not force them. Simply rotate the attachment back and forth slowly with the bucket cylinders of the loader and the QT pins should fall into place. Periodically grease the QT pins and sliding latches.
- 4. Secure the QT pins in the "down" position by sliding the latches down.







ITEM NO.	PART NUMBER	DESCRIPTION	Pin Up Latch Up/QTY.
1	QT02-01L	SLIDING LATCH ASSY, QT, LH	1
2	QT02-01R	SLIDING LATCH ASSY, QT, RH	1
3	QT02-14	RETAINING PIN ASSEMBLY, QT	2
4	QT30-W	WELDED QT FRAME	1



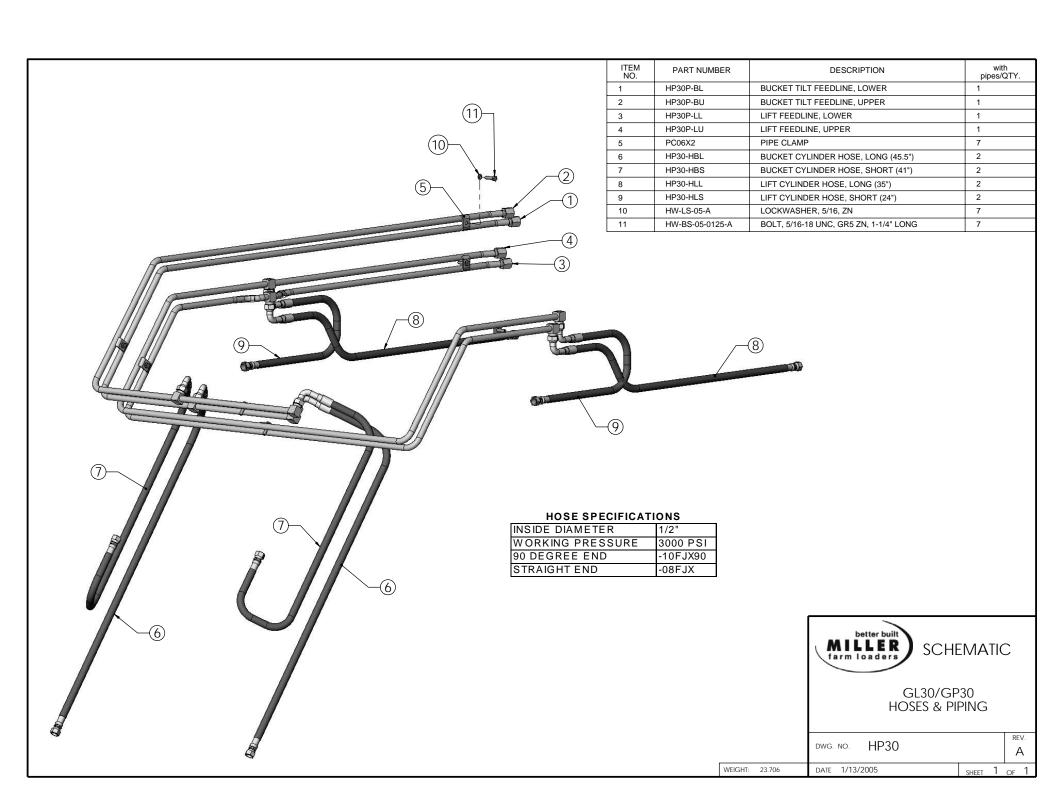
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
4	HW-NS-06-A	NUT, 3/8-16 UNC, CL, ZN	4
5	HW-SP-01	SPRING, QT HANDLE	4
6	HW-WS-06-A	WASHER, 3/8, FLAT, ZN	4

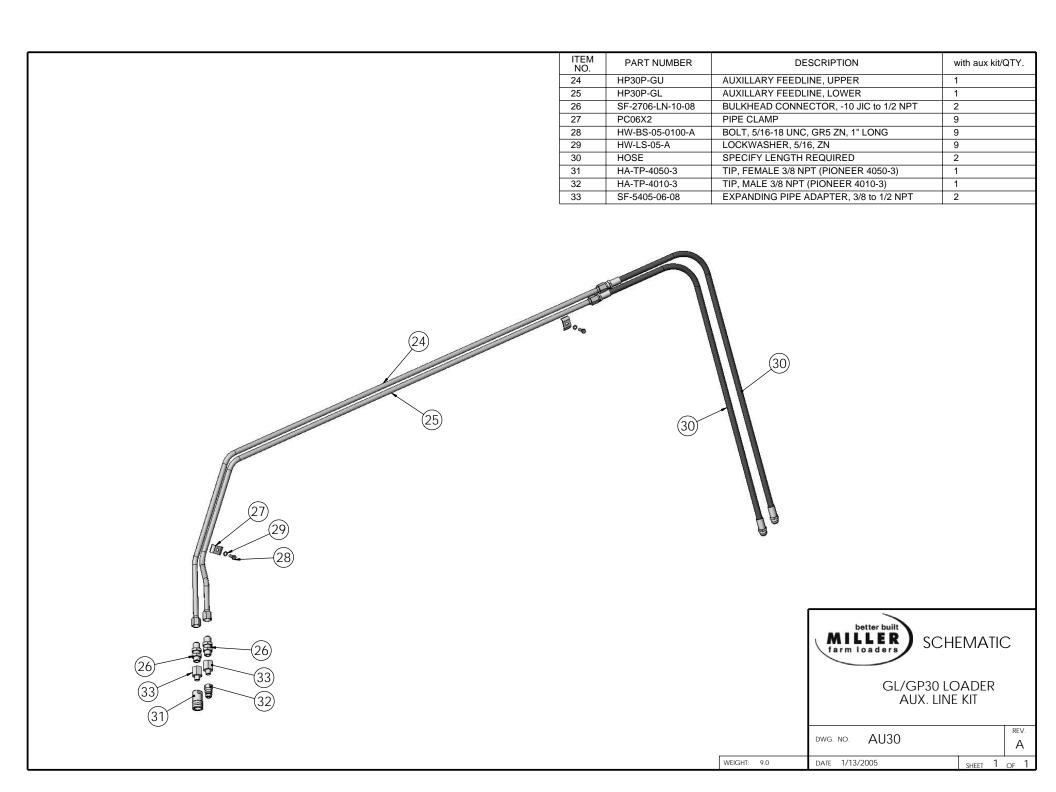


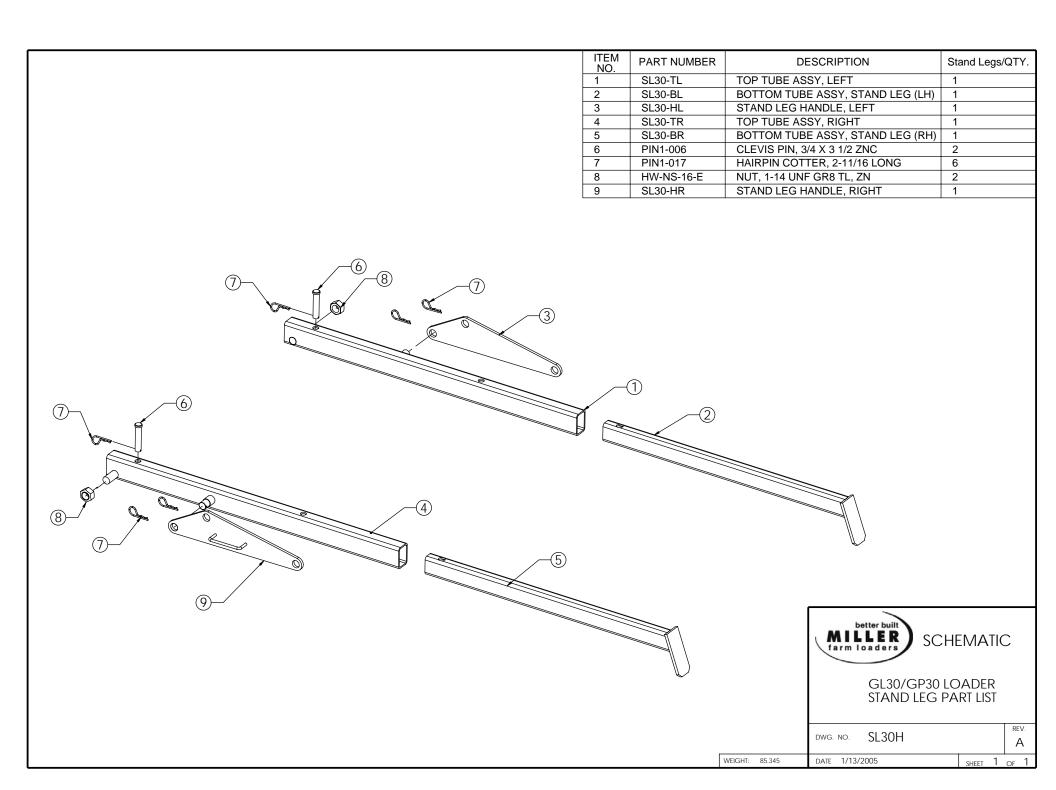
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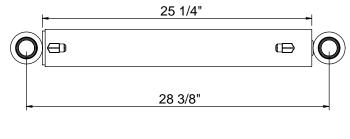
DWG. NO. QT30

WEIGHT: 246.509 DATE 1/13/2005 SHEET

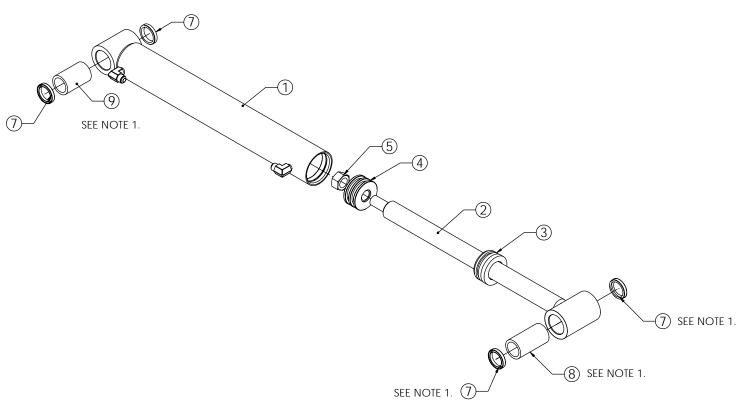








ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	CY-059T	TUBE ASSEMBLY, GP/GL25-30 BUCKET	1
2	CY-059D	ROD ASSY, GL/GP30 BUCKET	1
3	CP-GL-3017-S	GLAND, 3017, SHORT-TAIL	1
4	CP-PS-3017-U	PISTON, 3017 U-CUP	1
5	HW-NS-16-A	NUT, 1-14 UNF, TOP LOCK, PLAIN	1
6	CP-KT-3017-U	P-KIT, 3.000 X 1.750 UC	1
7	PS-1500-45	Pin Seal (MRW), 1.50 ID x 2.0 OD x 5/16 Thick	4
8	BR-2000K-3750	COMPOSITE BEARING, 1.50 BORE, 3.75 LONG	1
9	BR-2000K-3125	COMPOSITE BEARING, 1.50 BORE, 3.125 LONG	1

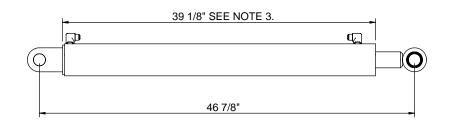


- NOTES: 1. BEARINGS AND SEALS ARE SOLD SEPARATELY. 2. PACKING KIT SHOWN IN PART LIST, BUT NOT SHOWN IN DRAWING.

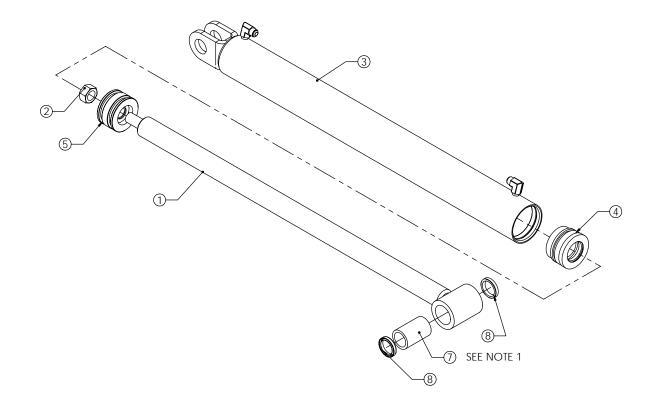
ALL I	DIMENSIONS IN INCHES		MILLER) SCHEMATIC
BORE Ø	3.000		farm loaders SCHEIVIATIC
rod Ø	1.750		CYLINDER, GL/GP30 BUCKET
STROKE	20-5/8"		
PORT STYLE	-08 JIC		DWG. NO. CY-059
WEIGHT:	49.822	LBS.	DATE 1/28/2005 SHEET 1 OF 1

CY-059 CYLINDER, GL/GP30 BUCKET





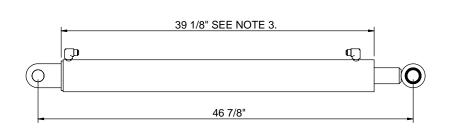
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	CY-058D	ROD ASSEMBLY, GL/GP30 LIFT	1
2	HW-NS-16-A	NUT, 1-14 UNF, TOP LOCK, PLAIN	1
3	CY-060-LT	TUBE ASSEMBLY, GP30 LIFT, LH	1
4	CP-GL-3520-L	GLAND, 3520 LONG-TAIL	1
5	CP-PS-3520-U	PISTON, 3520 U-CUP	1
6	CP-KT-3520-U	P-KIT, 3.500 X 2.000 UC	1
7	BR-2000K-3125	COMPOSITE BEARING, 1.50 BORE, 3.125 LONG	1
8	PS-1500-45	Pin Seal (MRW), 1.50 ID x 2.0 OD x 5/16 Thick	2



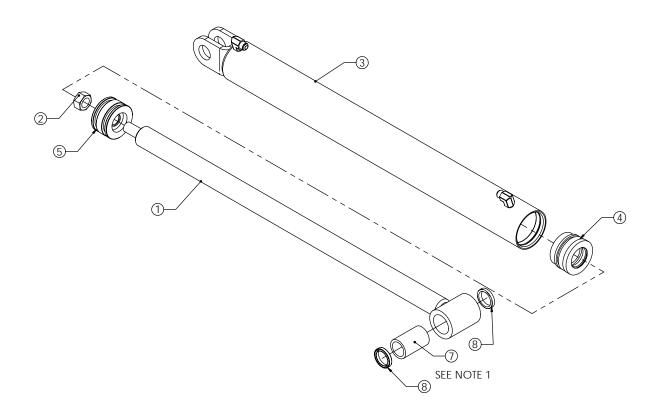
NOTES: 1. BEARING AND SEALS SOLD SEPARATELY. 2. PACKING KIT SHOWN IN PART LIST, BUT NOT SHOWN IN DRAWING. 3. EARLY CYLINDERS (12/04-2/05) WERE 1" SHORTER AND HAD 1" LESS STROKE.

ALL	DIMENSIONS IN INCHES		better built
bore Ø	3.500		MILLER SCHEMATIC
rod Ø	2.000		LIFT CYLINDER, GP30, LH
STROKE	33-1/4"		
PORT STYLE	-08 JIC		DWG. NO. CY-060-L
WEIGHT:	85.856	LBS.	DATE 1/28/2005 SHEET 1 OF 1



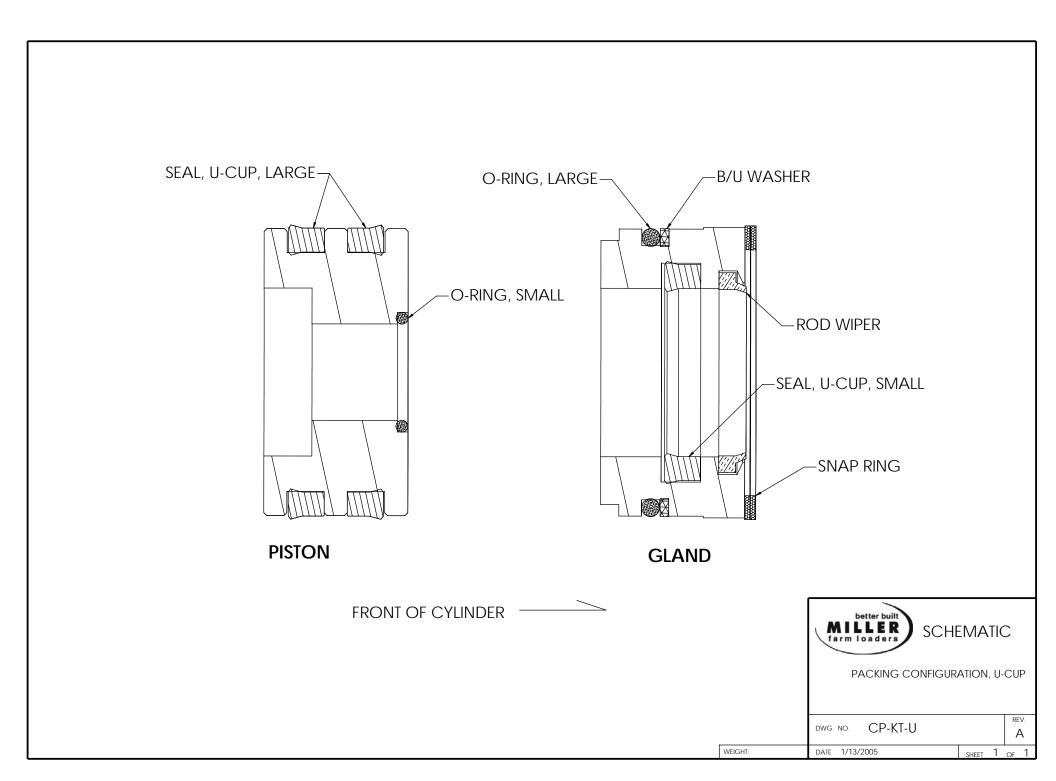


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	CY-058D	ROD ASSEMBLY, GL/GP30 LIFT	1
2	HW-NS-16-A	NUT, 1-14 UNF, TOP LOCK, PLAIN	1
3	CY-060-RT	TUBE ASSEMBLY, GP30 LIFT, RH	1
4	CP-GL-3520-L	GLAND, 3520 LONG-TAIL	1
5	CP-PS-3520-U	PISTON, 3520 U-CUP	1
6	CP-KT-3520-U	P-KIT, 3.500 X 2.000 UC	1
7	BR-2000K-3125	COMPOSITE BEARING, 1.50 BORE, 3.125 LONG	1
8	PS-1500-45	Pin Seal (MRW), 1.50 ID x 2.0 OD x 5/16 Thick	2

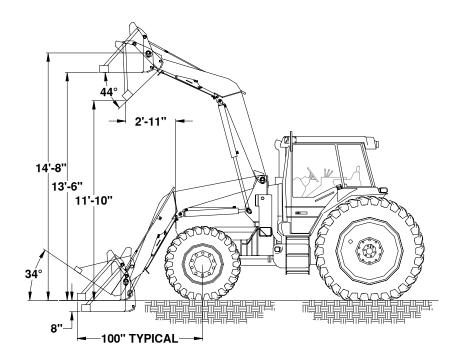


- NOTES: 1. BEARING AND SEALS SOLD SEPARATELY FROM COMPLETE CYLINDER. 2. PACKING KIT SHOWN IN PART LIST, BUT NOT SHOWN IN DRAWING. 3. EARLY CYLINDERS (12/04-2/05) WERE 1" SHORTER AND HAD 1" LESS STROKE.

ALL DI	MENSIONS IN INCHES		better built		
BORE Ø	3.500		SCHEMATIC SCHEMATIC		
rod Ø	2.000		Lift Cylinder, GP30, R	H	
STROKE	33-3/4"				
PORT STYLE	-08 JIC		DWG. NO. CY-060-R		
WEIGHT:	85.856	LBS.	DATE 1/28/2005 SHEET	1 OF	1



GP30 SPECIFICATIONS



SPECIFICATIONS AND PERFORMANCE NUMBERS ARE FOR REFERENCE ONLY

LIFTING CAPACITY:

Breakaway Lift : 7400 lbs. Full Height Lift : 6000 lbs.

With load 800mm (31.5") ahead of bucket pivot And 2850 psi pressure at lift cylinders

WEIGHTS:

Loader (less bucket and mounts) : 2090 lbs. 8 FT Bucket : 800 lbs. Mounting Kit (Typical) : 710 lbs. Total : 3600 lbs.



WARRANTY

Dec 2004

ALL PRODUCTS MANUFACTURED BY MILLER LOADERS, INCOPRORATED (MLI) EXCEPT THE CHROME-PLATED PIVOT PINS USED ON GREASELESS LOADERS, ARE GUARENTEED TO THE ORIGINAL PURCHASER FOR A PERIOD OF ONE YEAR FROM THE DAY OF PURCHASE AGAINST ANY DEFECTS IN MATERIALS AND WORKMANSHIP OF FARM LOADERS AND ATTACHMENTS THAT ARE USED IN NORMAL FARM OPERATIONS. THE CHROME-PLATED PIVOT PINS USED ON GREASELESS LOADERS ARE GUARENTEED TO THE ORIGINAL PURCHASER FOR A PERIOD OF FIVE YEARS FROM THE DAY OF PURCHASE AGAINST ANY DEFECTS IN MATERIALS AND WORKMANSHIP OR AGAINST WEAR THROUGH OF THE CHROME FINISH COVERING AT LEAST ONE-QUARTER OF THE PIN SURFACE.

ALL GREASELESS COMPOSITE BEARINGS SOLD BUT NOT MANUFACTURED BY **MLI** ARE GUARENTEED TO THE ORIGINAL PURCHASER FOR A PERIOD OF FIVE YEARS FROM THE DAY OF PURCHASE AGAINST BREAKAGE OR LOSS OF THEIR SELF-LUBRICATING PROPERTY.

THE FIVE YEAR WARRANTY FOR THE CHROME-PLATED PIVOT PINS AND GREASELESS COMPOSITE BEARINGS IS LIMITED TO THE PARTS ONLY. **MLI** IS NOT RESPONSIBLE FOR ANY LABOR NECESSARY FOR THE INSPECTION, REMOVAL, OR REPLACEMENT OF SAID PIVOT PINS AND/OR COMPOSITE BEARINGS.

ALL PARTS SOLD BUT NOT MANUFACTURED BY **MLI** THAT INCLUDE BUT ARE NOT LIMITED TO ZINC-PLATED PINS, HOSES, VALVES, QUICK COUPLERS, PUMPS, TANKS, ETC. ARE COVERED ONLY TO THE EXTENT OF THE MANUFACTURE'S WARRANTY ON THESE ITEMS. **MLI** DOES NOT WARRANTY THESE ITEMS EXPRESSLY OR IMPLIEDLY.

DEFACEMENT OF ANY PART BY WELDING OR OTHERWISE ALTERING, OR EXCESSIVE WEAR ON PINS CAUSED BY LACK OF LUBRICATION, NULLIFIES THE WARRANTY ON THE MLI PRODUCT.

MLI ASSUMES NO RESPONSIBILITY AS TO THE PERFORMANCE OR FAILURE OF A TRACTOR'S HYDRAULIC SYSTEM.

THE HYDRAULIC COMPONENTS OF THE **MLI** PRODUCTS ARE GUARENTEED UP TO A PRESSURE OF 3000 POUNDS PER SQUARE INCH AT A MAXIMUM FLOW RATE OF 30 GALLONS PER MINUTE.

MLI ASSUMES NO RESPONSIBILITY FOR THE FAILURE OF THE PURCHASER TO SECURE THE LOADER TO THE TRACTOR PROPER, WHICH INCLUDES PROPER BOLT TIGHTENING AND SECURING OF ALL CONNECTION POINTS.

ALL ITEMS MANUFACTURED BY **MLI** REQUIRING WARRANTY CONSIDERATION MUST BE RETURNED TO **MLI** OR A DESIGNATED REPRESENTATIVE BY THE ORIGINAL PURCHASER. ANY ITEM SO RETURNED BY COMMON CARRIER MUST BE PREPAID FREIGHT.

THE WARRANTIES PROVIDED BY **MLI** AS REFERRED TO ABOVE SHALL BE THE SOLE AND EXCLUSIVE WARRANTIES. THERE SHALL BE NO OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OR ANY OTHER OBLIGATION ON THE PART OF **MLI** WITH RESPECT TO PRODUCTS COVERED BY THIS WARRANTY.

IN NO EVENT SHALL THE WARRANTIES OF **MLI** REQUIRE MORE FROM **MLI** THAN THE REPAIR OR REPLACEMENT OF ANY PART OR PARTS WHICH ARE FOUND TO BE DEFECTIVE WITHIN THE EFFECTIVE PERIOD OF THE WARRANTY, **MLI** SHALL HAVE NO LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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