



PL-2X LOADERPARTS and INSTRUCTIONS

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

DANGER

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 is on even ground and front wheels are straight ahead

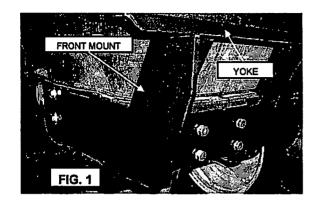
TO PREVENT POSSIBLE PERSONAL INJURY, OBSERVE THE FOLLOWING SAFETY PRECAUTIONS

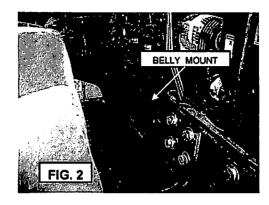
- Never walk or work under a raised loader
- Always bleed the hydraulic system to zero pressure before performing repairs on any component of the hydraulic system
- When mounting or dismounting the loader from the tractor, operate hydraulic controls slowly
- When removing the Quick-tatch bucket, it should be level and no higher than six inches above the ground. Any other position would allow the bucket to swing away from the loader when the Quick-tatch pins are lifted from their locked position

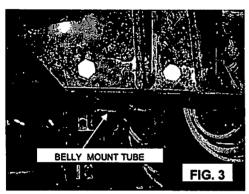
TABLE OF CONTENTS

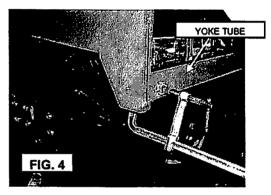
- Mounting Loader on Tractor
- Dismounting Loader
- Quick-attach Instructions
- Parts Schematics
- Cylinder Packing Detail
- Warranty

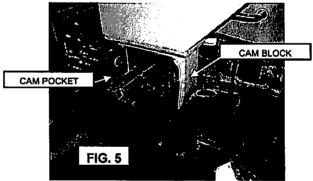
INSTALL MOUNTS ON TRACTOR











STEP 1 Install the front mount onto the front casting of the tractor. Tighten all bolts that secure the front mount. See Figure 1.

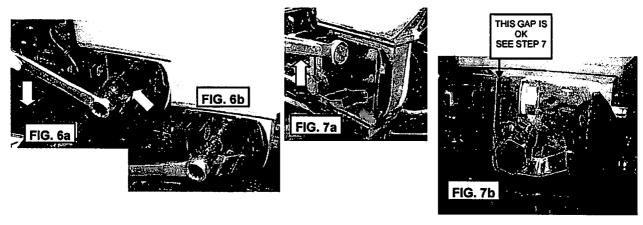
STEP 2 Install the belly mounts onto the tractor—one on the right side and one on the left side. Install the bolts and washers, but **DO NOT TIGHTEN THEM YET!** The belly mounts must be able to move back and forth in the following steps. See Figure 2.

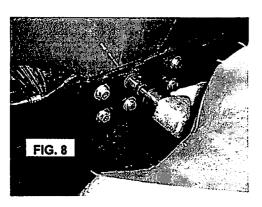
STEP 3 Install the belly mount tube that hangs in between the belly mounts. Loosely connect the bolts and nuts, do not tighten these yet either. See Figure 3.

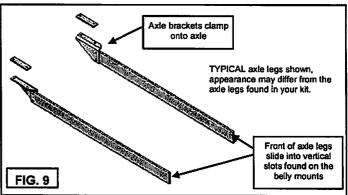
STEP 4 Drive into the loader so that the yoke tube of the loader slides into the yoke of the front mount. Use (2) C-clamps (one on each side of the yoke tube) to fully seat the tube into the yoke and secure it. See Figure 4.

STEP 5 The cam blocks of the loader should be positioned in the cam pockets as shown in Figure 5.

INSTALL MOUNTS ON TRACTOR







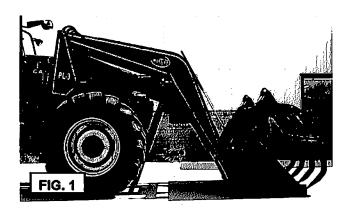
STEP 6 Use a 1-1/2" wrench to turn the cam which pulls the cam block into the pocket. Since the loader was secured to the front mount with c-clamps in Step 4, the belly mounts will shift slightly as the cam is rotated. This is normal. See Figures 6a and 6b.

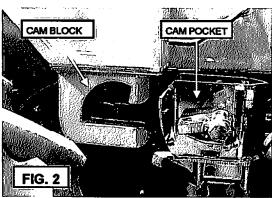
STEP 7 With a 1-1/2" end wrench or socket wrench (*Not* an impact wrench or cheater bar!) tighten the 1" bolt that secures the cam. See Figures 7a and 7b. *Important!* The gap shown in Figure 7b is the proper gap after tightening. The gap is supposed to be this way. Do not think you have to tighten the bolt until the gap is closed.

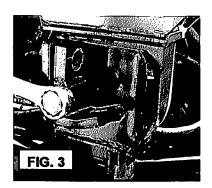
STEP 8 Now that the mounts are in the proper position and the cam bolts are tight, all of the belly mount bolts can be tightened. See Figure 8. Remove the c-clamps that were used in Step 4. If your mount kit includes axle legs, proceed to Step 9, otherwise, your mount installation is complete.

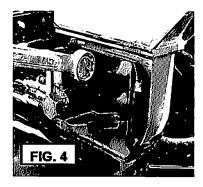
STEP 9 Some mounting kits include axle legs and axle brackets. See Figure 9. Hang the axle brackets from the tractor's axle without tightening the bolts. Usually the narrow end of the bracket is to the rear. Insert the front of theaxle legs into the 1" x 5" slots found on the belly mounts. Bolt the rear of the axle legs to the axle brackets. Tighten the bolts that are clamping the brackets to the axle. The final step is to tighten the 5/8 set-screw (bolt) on the belly mount that is pressing down on the very front of the axle leg. The purpose of the axle legs is to protect the bolted connections on the tractor (i.e., motor to tranny, tranny to bull gear) in the event the rear axle is unweighted during loader operation and the rear tires are no longer supporting the tractor. Whether or not your mounting kit included axle legs depends on the construction of the tractor. Most newer tractors do not require axle legs.

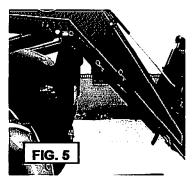
MOUNTING INSTRUCTIONS







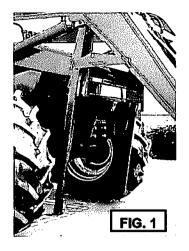


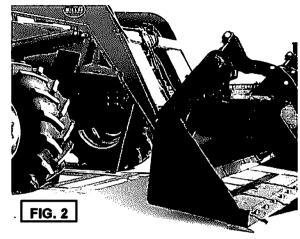


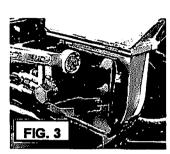
STEP 1 Approach the loader slowly and place the tractor close enough to allow the connection of the hydraulic hoses. Connect the hoses to the tractor so that the loader can be operated. See Figure 1.

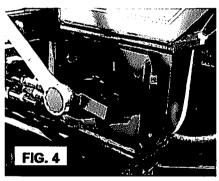
- **STEP 2** Tilt the bucket down slowly so that the cam block on the loader aligns with the cam pocket on the mountings. See Figure 2. Slowly drive the tractor forward so that the cam blocks slide into the cam pockets and the front tube slides into the yoke tube on the front of the loader.
- STEP 3 Use a 1-1/2" wrench to turn the cam which pulls the cam block into the pocket. It needs only to be engaged enough so that the 1" bolt can be installed in the hole and the threads started. See Figures 3 and 4.
- STEP 4 Tighten the 1" bolt that secures the cam. See Figure 4.
- **STEP 5** Raise the loader off the ground. Retract the stand legs and position them in their stored location. See Figure 5.

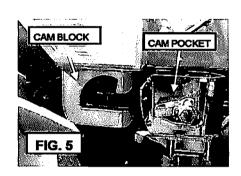
DISMOUNT INSTRUCTIONS

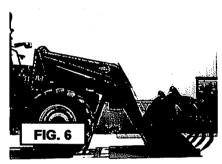








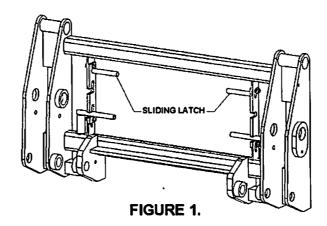


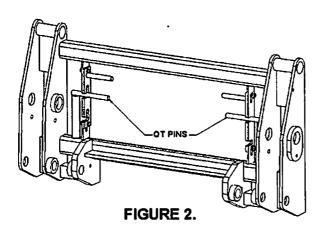


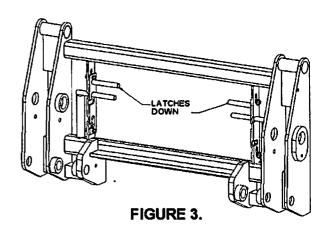
STEP 1 DRIVE ONTO FLAT, LEVEL CONCRETE. Raise the loader and place the stand legs in the position shown in Figure 1.

- **STEP 2** Gently lower the loader until the stand legs rest on the ground. Tilt the bucket forward until the cutting edge is also resting on the ground. See Figure 2.
- STEP 3 Loosen and remove the 1" bolts that secure the cams on both sides of the loader. See Figure 3.
- STEP 4 Use a 1-1/2" wrench to turn the cams forward. See Figure 4.
- STEP 5 Slowly back up the tractor until the cam blocks are free from the cam pockets. See Figure 5.
- STEP 6 Slowly roll the bucket until it is flat on the ground. This motion will also tilt the loader up to its stored position. Disconnect the hydraulic hoses and back away from the loader. See Figure 6.

QUICK-ATTACH INSTRUCTIONS





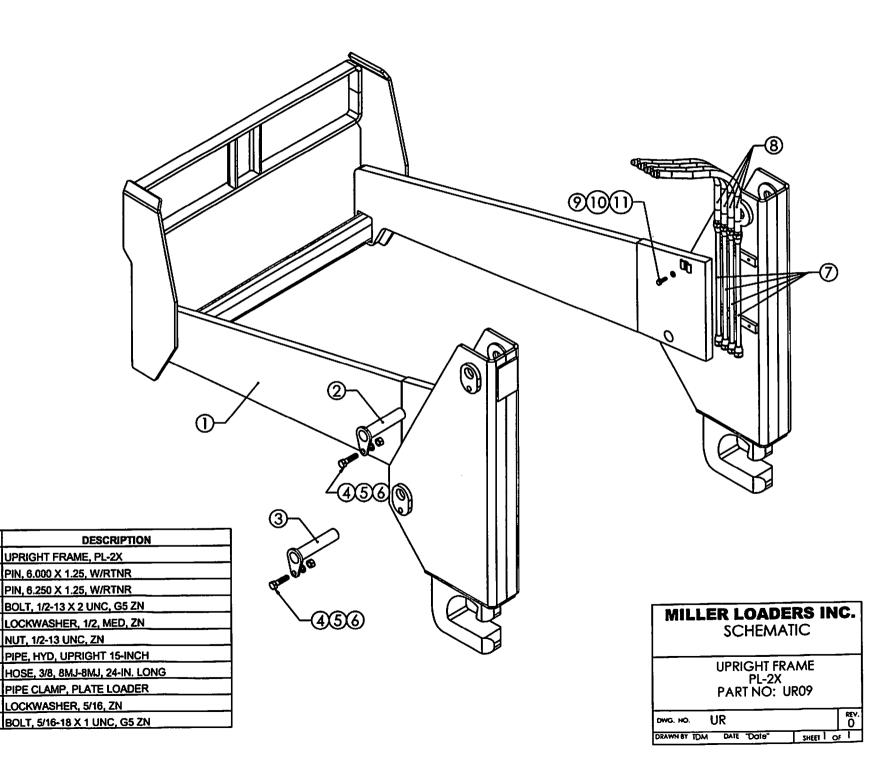


UNCOUPLING

- 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

- 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.



PART NO.

PN-06000-A10

PN-06250-A10

HW-LS-08-A

HW-NS-08-A

HP02-UR-01

HS-06-024-A

HW-LS-05-A

HW-BS-05-0100-A

MF02-22

HW-BS-08-0200-A

ITEM

3

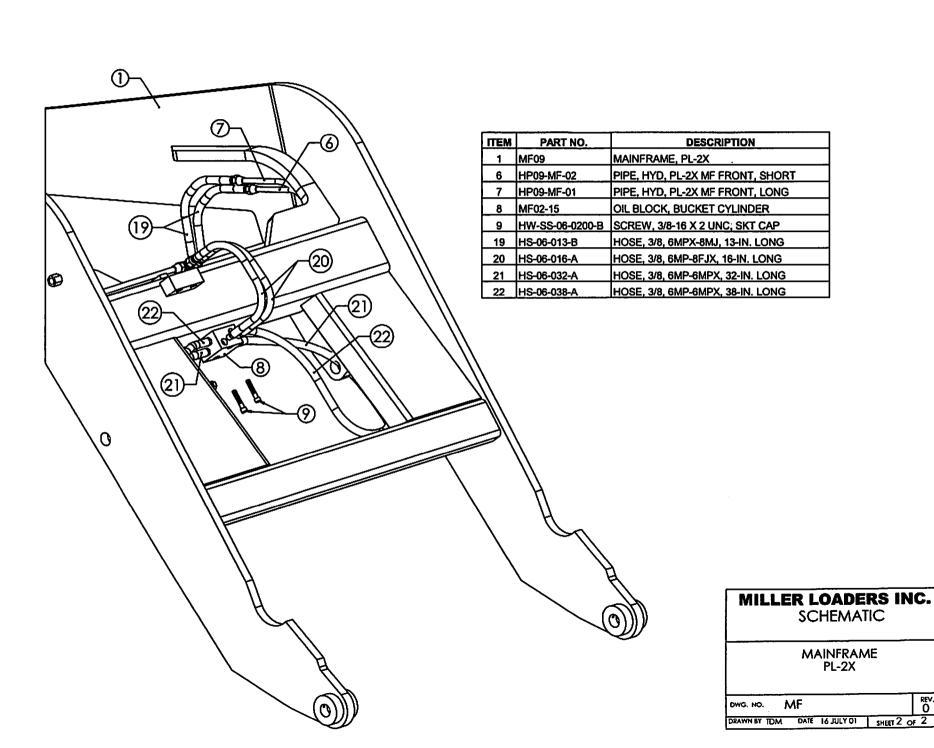
5

6

8

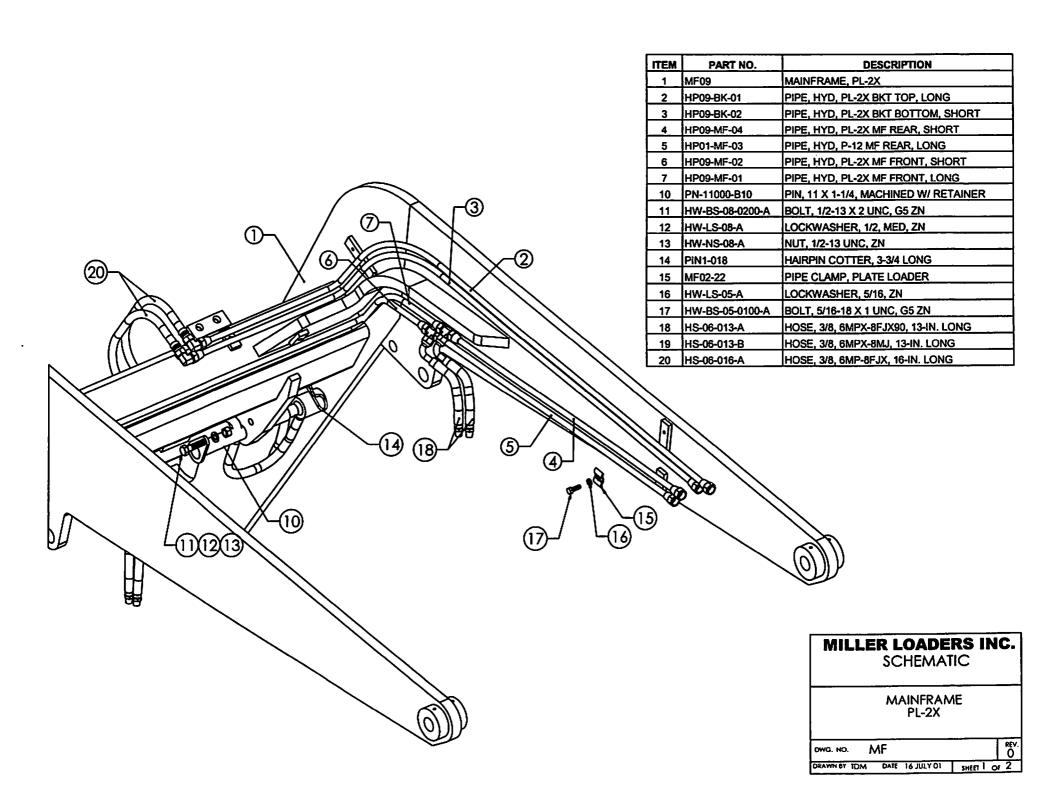
9

UR09

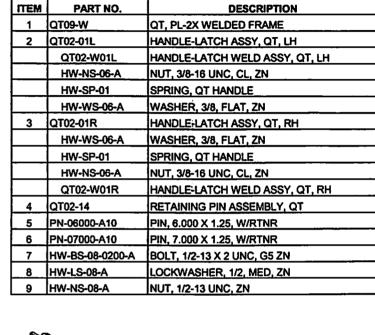


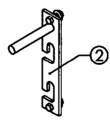
REV.

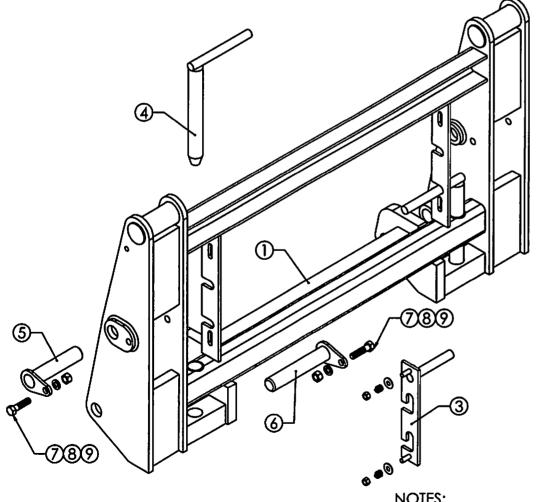
SHEET 2 OF 2



COMPLETE ASSEMBLY PART NO: QT09



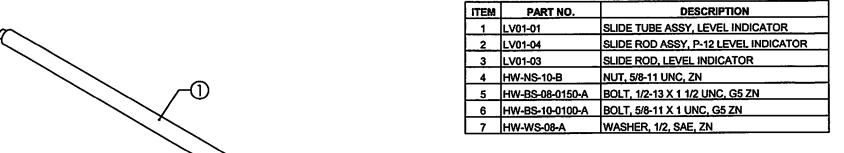




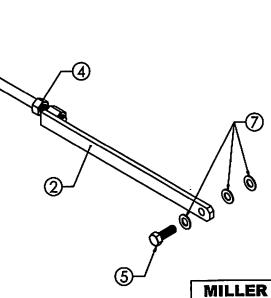
NOTES:
1. ITEMS 5, 6, 7, 8, AND 9 ARE SOLD SEPARATELY.

MILLER LOADERS IN SCHEMATIC	C.
QT FRAME PL-2X PART NO: QT09	
DWG. NO. QT	REV.
DRAWN BY TOM DATE 13 JULY OT SHEET O	, 1

COMPLETE ASSEMBLY PART NO: LV01



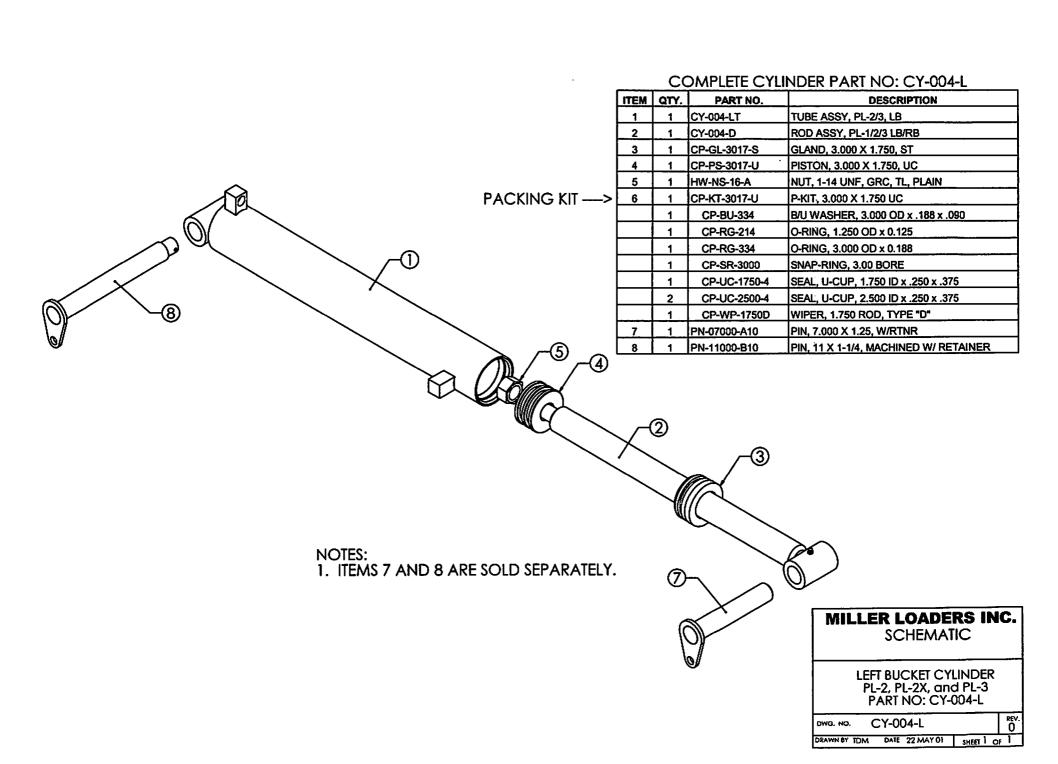
0



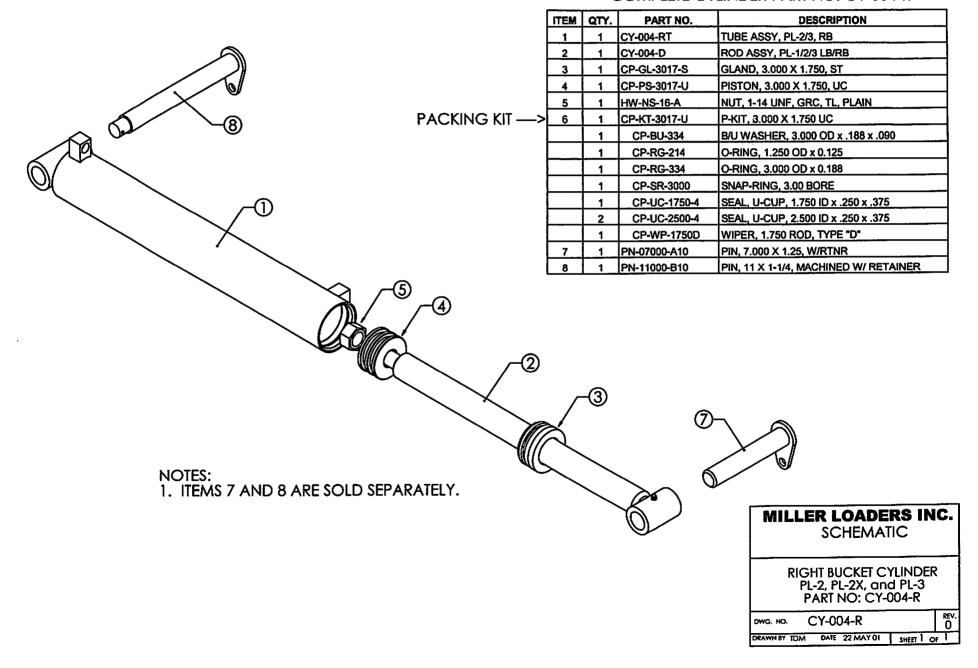
MILLER LOADERS INC. SCHEMATIC

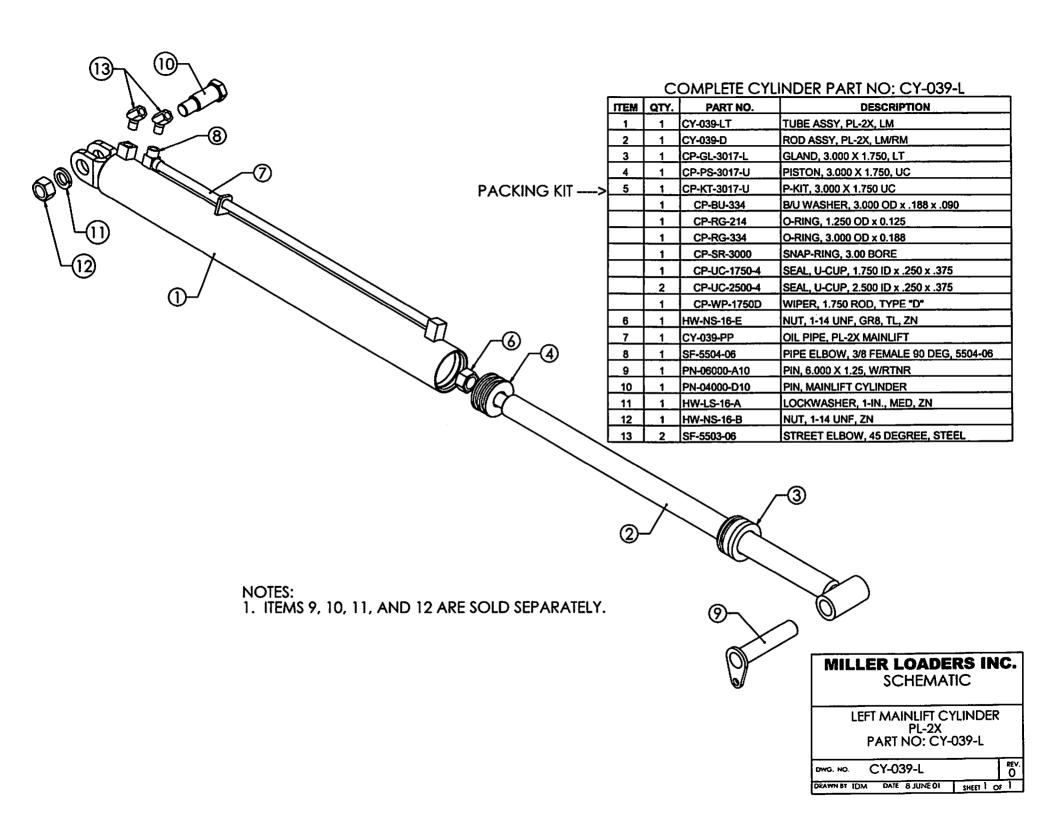
LEVEL INDICATOR KIT P-12, PL-2X, PL-3, PL-4 and PL-4G PART NO: LV01

DWG. NO.	LV			REV.
RAWN BY TE	OM DATE	17 MAY 01	SHEET 1 C	ış İ

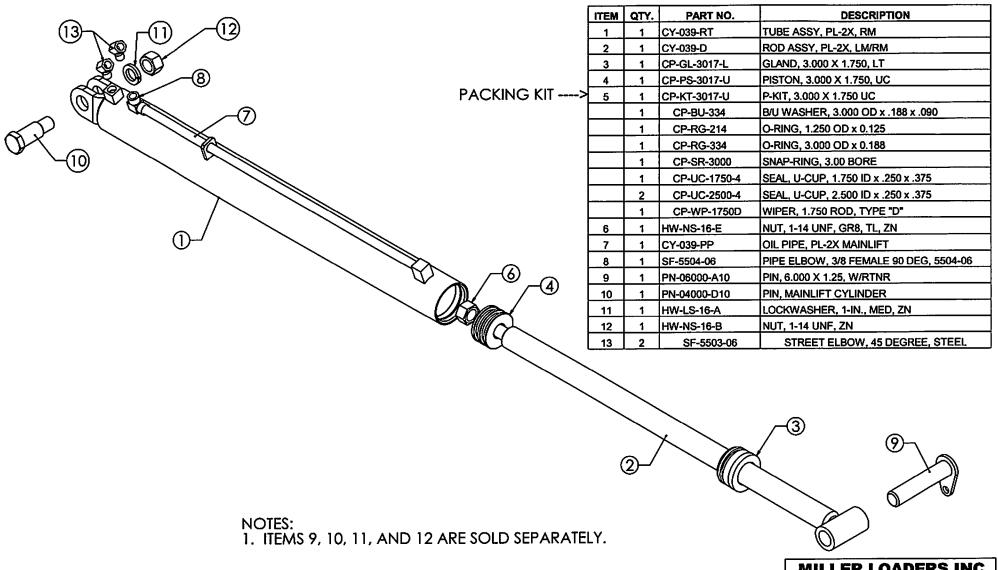


COMPLETE CYLINDER PART NO: CY-004-R





COMPLETE CYLINDER PART NO: CY-039-R



MILLER LOADERS INC. SCHEMATIC RIGHT MAINLIFT CYLINDER PL-2X PART NO: CY-039-R DWG. NO. CY-039-R DRAWN BY TDM DATE 8 JUNE 01 SHEET 1 OF 1

COMPLETE RIGHT HAND ASSEMBLY PART NO: SLO9-R

		13 11 12 7 100 21 11 12 1 1 7 11 11 11 0 1 0 20 7	
ITEM		DESCRIPTION	
1	SL09-01TAR	TOP TUBE ASSY, RH, PL-2X S-LEG	
2	SL09-01BA	BTM TUBE ASSY, S-LEG, PL-2X	9 0
3	SL09-05L	HANDLE, S-LEG, PL-2X	(7)—(4)
4	PIN1-006	CLEVIS PIN, 3/4 X 3 1/2 ZNC	
5	PIN1-017	HAIRPIN COTTER, 2-11/16 LONG	
6	PIN1-018	HAIRPIN COTTER, 3-3/4 LONG	
7	HW-NS-16-E	NUT, 1-14 UNF, GR8, TL, ZN	
		3 NOTES:	AND 7 ARE SOLD SEPARATELY
			COMPLETE LEFT HAND ASSEMBLY PART NO: SL09-L

ITEM	PART NO.	DESCRIPTION
1	SL09-01TAL	TOP TUBE ASSY, LH, PL-2X S-LEG
2	SL09-01BA	BTM TUBE ASSY, S-LEG, PL-2X
3	SL09-05L	HANDLE, S-LEG, PL-2X
4	PIN1-006	CLEVIS PIN, 3/4 X 3 1/2 ZNC
5	PIN1-017	HAIRPIN COTTER, 2-11/16 LONG
6	PIN1-018	HAIRPIN COTTER, 3-3/4 LONG
7	HW-NS-16-E	NUT, 1-14 UNF, GR8, TL, ZN

MI	SCHEMATIC	IC.
	STAND LEG KIT PL-2X KIT PART NO: SL09	
DWG, N	O. SL	REV O

COMPLETE ASSEMBLY PART NO: HY-AU-09

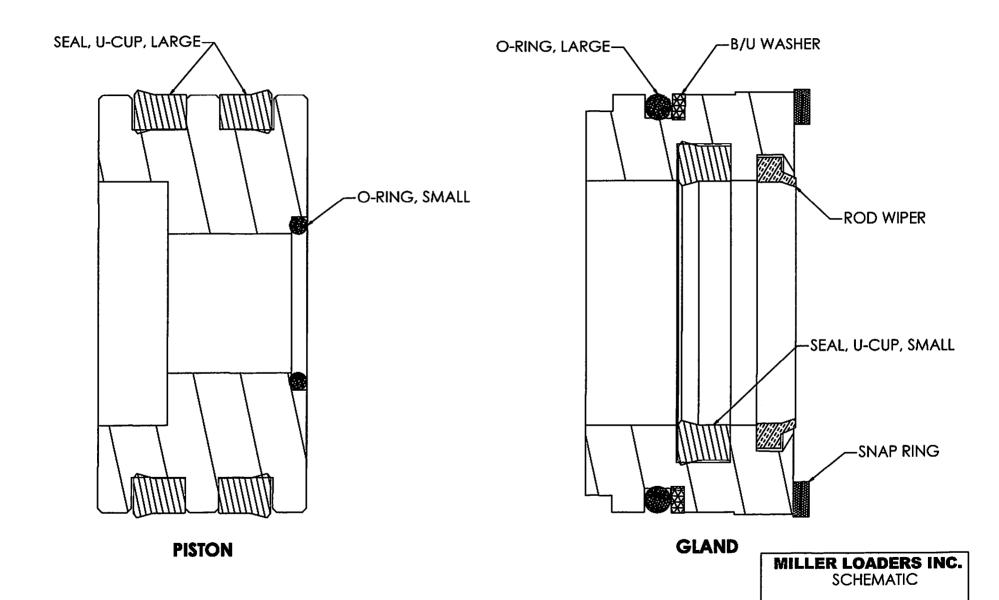
EM	PART NO.	DESCRIPTION	
1	HP09-GP-01	PIPE, HYD, PL-2X GRAPPLE, SHORT	
	HP09-GP-01	PIPE, PL-2 GRAPPLE, 63.00 LONG	
	SF-0304-08	FLARE NUT, 1/2-IN JIC, LONG, 304-08	
	SF-2500-08-08	UNION ELBOW, 90 DEG, 2500-08-08	
2	HP09-GP-02	PIPE, HYD, PL-2X GRAPPLE, LONG	
	SF-2500-08-08	UNION ELBOW, 90 DEG, 2500-08-08	
	SF-0304-08	FLARE NUT, 1/2-IN JIC, LONG, 304-08	
	HP09-GP-02	PIPE, PL-2 GRAPPLE, 65.50 LONG	
3	HS-06-024-A	HOSE, 3/8, 8MJ-8MJ, 24-IN. LONG	
4	HP02-UR-01	PIPE, HYD, UPRIGHT 15-INCH	/ -3
	HP02-UR-01	PIPE, UPRIGHT, 15-INCH LONG	
	SF-0304-08	FLARE NUT, 1/2-IN JIC, LONG, 304-08	
5	HS-06-013-C	HOSE, 3/8, 6MPX90-8FJX, 13-IN. LONG	
;	HS-06-011-A	HOSE, 3/8, 6MPX90-8FJX, 11-IN. LONG	
7	MF02-16	OIL BLOCK, GRAPPLE	
3	PF-CN06	CLOSE NIPPLE, 3/8 NPT	
)	HA-TP-4010-3	TIP, MALE 3/8 NPT	Linea H
<u> </u>	HA-TP-4050-3	TIP, FEMALE 3/8 NPT	
	MF02-22	PIPE CLAMP, PLATE LOADER	FI FI
 2	HW-LS-05-A	LOCKWASHER, 5/16, ZN	
_	HW-BS-05-0100-A	BOLT, 5/16-18 X 1 UNC, G5 ZN	(2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
T\ W		OSES ARE ALSO SUPPLIED HE LENGTH REQUIRED HE TRACTOR.	THIS OIL BLOCK IS SUPPLIED WITH

REV.

SHEET OF

DWG. NO. AU

DRAWN BY TOM DATE 16 JULY 01



PACKING KIT ASSEMBLY U-CUP STYLE

DRAWN BY TOM DATE 21 MAY 01 SHEET 1 OF 1

CP-KT-U

DWG. NO.

REV.



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.

MILLER LOADERS INC, 1242 ARIZONA AVE, LARCHWOOD, IA 51241

PHONE: 1-800-570-8205 Or (712) 477-2795

FAX: (712) 477-2500