



PL-3 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

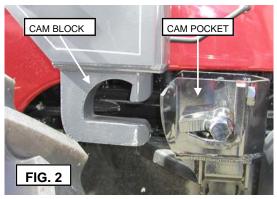
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SERIAL No. of Loader Purchased	
Date Purchased	

MOUNTING INSTRUCTIONS











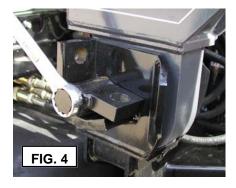
- **STEP 1** Approach the loader slowly and place the tractor close enough to allow the connection of the hydraulic hoses. Connect the hoses to the tractor so that the loader can be operated. See Figure 1.
- **STEP 2** Tilt the bucket down slowly so that the cam block on the loader aligns with the cam 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.

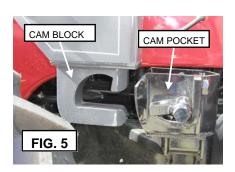
DISMOUNT INSTRUCTIONS







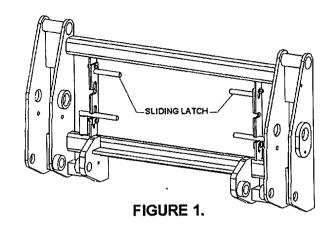


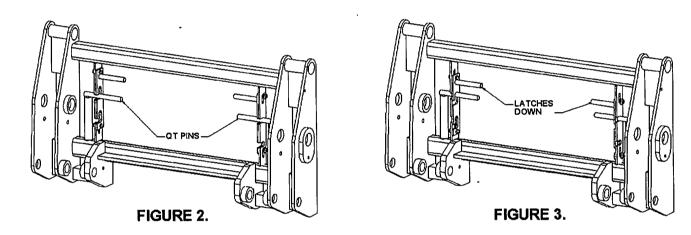




- **STEP 1** DRIVE ONTO FLAT, LEVEL CONCRETE. Raise the loader and place the stand legs in the position shown in Figure 1.
- **STEP 2** Gently lower the loader until the stand legs rest on the ground. Tilt the bucket forward until the cutting edge is also resting on the ground. See Figure 2.
- **STEP 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



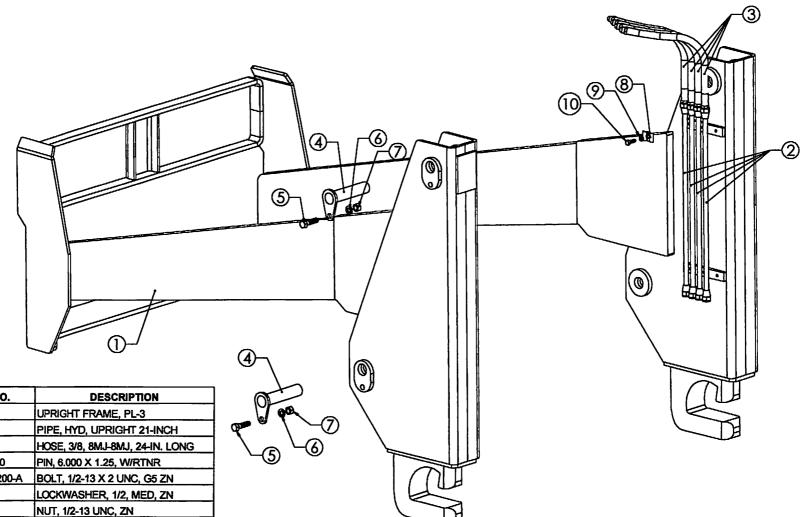


UNCOUPLING

- 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

- 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.
- Secure the QT pins in the "down" position by sliding the latches down.

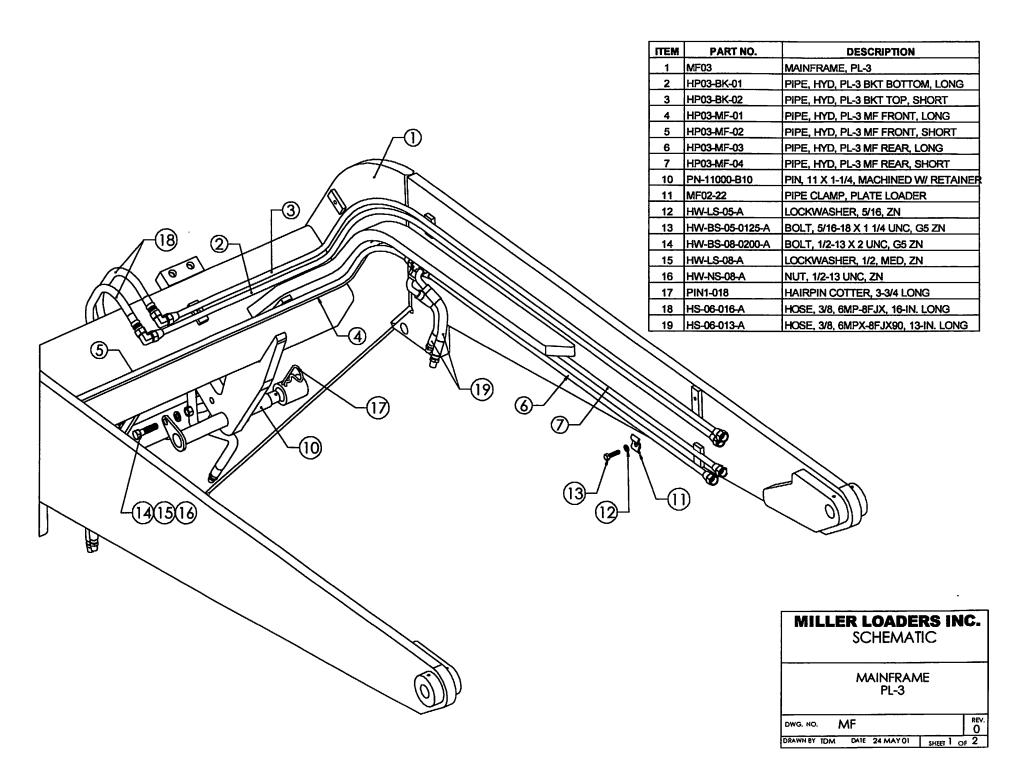


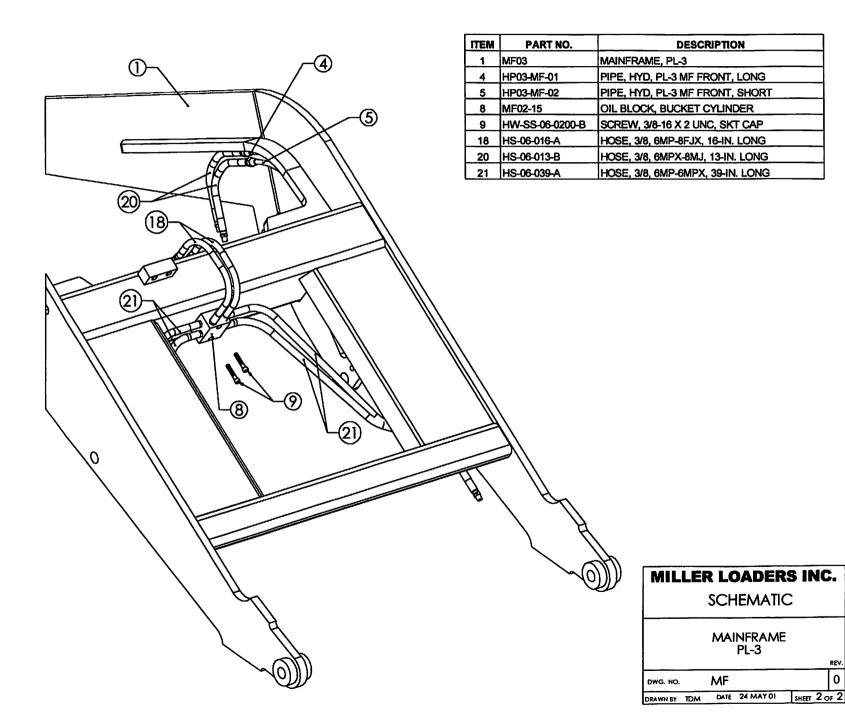
ITEM	PART NO.	DESCRIPTION
1	UR03	UPRIGHT FRAME, PL-3
2	HP01-UR-01	PIPE, HYD, UPRIGHT 21-INCH
3_	HS-06-024-A	HOSE, 3/8, 8MJ-8MJ, 24-IN. LONG
4	PN-06000-A10	PIN, 6.000 X 1.25, W/RTNR
5	HW-BS-08-0200-A	BOLT, 1/2-13 X 2 UNC, G5 ZN
6	HW-LS-08-A	LOCKWASHER, 1/2, MED, ZN
7	HW-NS-08-A	NUT, 1/2-13 UNC, ZN
8	MF02-22	PIPE CLAMP, PLATE LOADER
9	HW-LS-05-A	LOCKWASHER, 5/16, ZN
10	HW-BS-05-0100-A	BOLT, 5/16-18 X 1 UNC, G5 ZN

MILLER LOADERS INC. SCHEMATIC

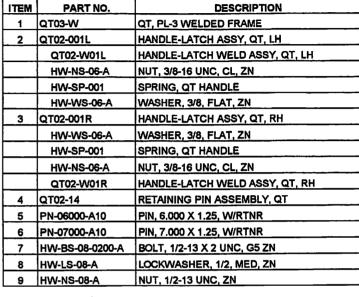
UPRIGHT FRAME PL-3

DWG. NO.	UR			REV.
DRAWN BY TO	M DATE	21 MAY 01	SHEET 1 O	: 1

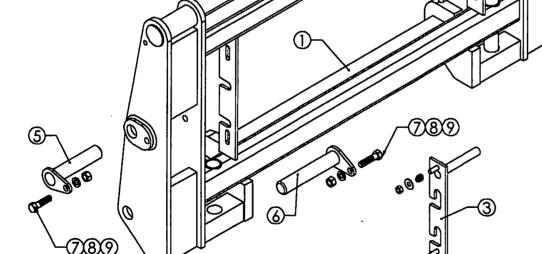




COMPLETE ASSEMBLY PART NO: QT03

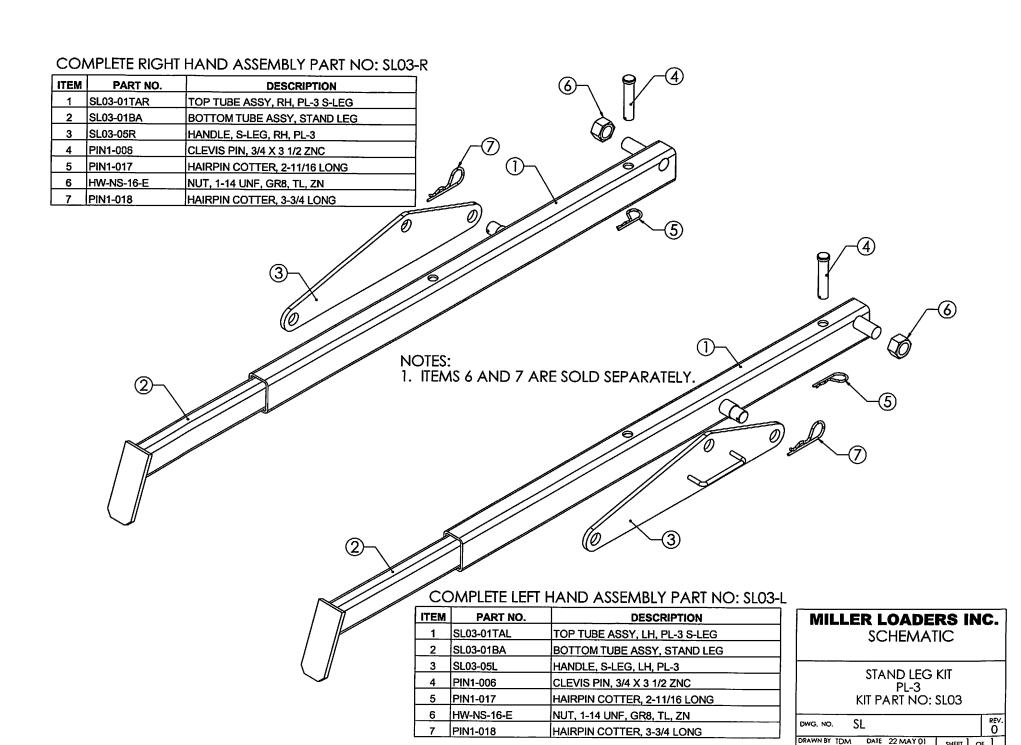


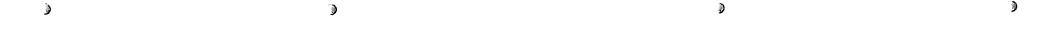




NOTES:
1. ITEMS 5, 6, 7, 8, AND 9 ARE SOLD SEPARATELY.

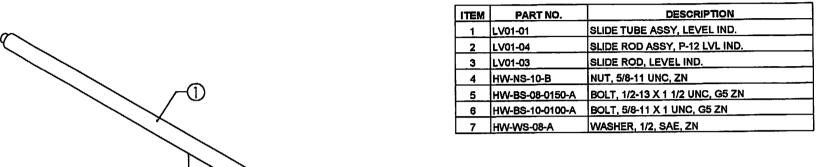
MILLER LOADEI SCHEMAT		C.	
QT FRAME PL-3, PL-4, and PL-4G PART NO: QT03			
DWG. NO. QT		REV.	
DRAWN BY TDM DATE 21 MAY 01	SHEET 1 O	βÌ	

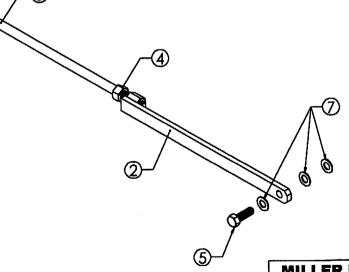




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MILLER LOADERS INC. SCHEMATIC

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

DRAWN BY	TDAA	DATE	17 MAY 01	SHEET 1 C	1
DWG. NO.	Ľ	V			O O

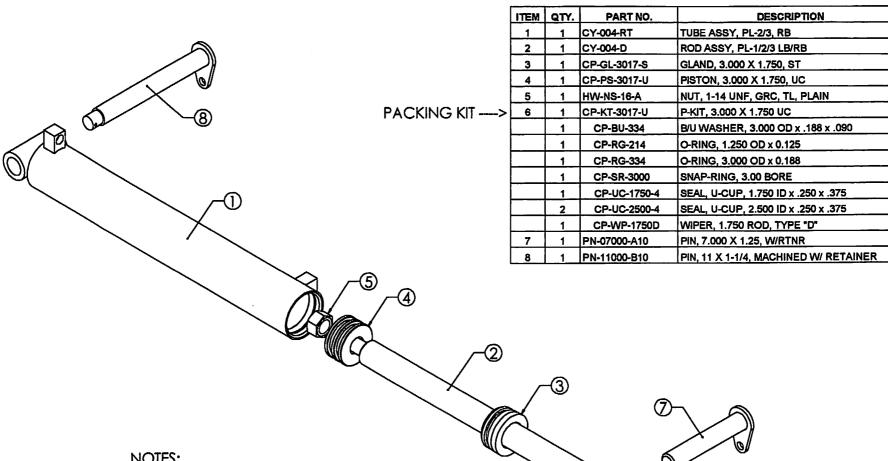
• • • COMPLETE CYLINDER PART NO: CY-004-L DESCRIPTION ITEM QTY. PART NO. CY-004-LT TUBE ASSY, PL-2/3, LB ROD ASSY, PL-1/2/3 LB/RB CY-004-D GLAND, 3.000 X 1.750, ST CP-GL-3017-S 3 PISTON, 3.000 X 1.750, UC CP-PS-3017-U NUT, 1-14 UNF, GRC, TL, PLAIN 5 HW-NS-16-A PACKING KIT ---> CP-KT-3017-U P-KIT, 3,000 X 1,750 UC 1 B/U WASHER, 3,000 OD x .188 x .090 CP-BU-334 O-RING, 1.250 OD x 0.125 CP-RG-214 O-RING, 3.000 OD x 0.188 CP-RG-334 SNAP-RING, 3.00 BORE CP-SR-3000 SEAL, U-CUP, 1.750 ID x .250 x .375 CP-UC-1750-4 SEAL, U-CUP, 2.500 ID x .250 x .375 CP-UC-2500-4 WIPER, 1.750 ROD, TYPE "D" CP-WP-1750D 7 PN-07000-A10 PIN, 7.000 X 1.25, W/RTNR PIN, 11 X 1-1/4, MACHINED W/ RETAINER PN-11000-B10 **NOTES:** 1. ITEMS 7 AND 8 ARE SOLD SEPARATELY. MILLER LOADERS INC. **SCHEMATIC** LEFT BUCKET CYLINDER PL-2 and PL-3

PART NO: CY-004-L

REV. CY-004-L DWG. NO. DRAWN BY TOM DATE 22 MAY 01 SHEET 1 OF 1

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COMPLETE CYLINDER PART NO: CY-004-R



NOTES:

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1. ITEMS 7 AND 8 ARE SOLD SEPARATELY.

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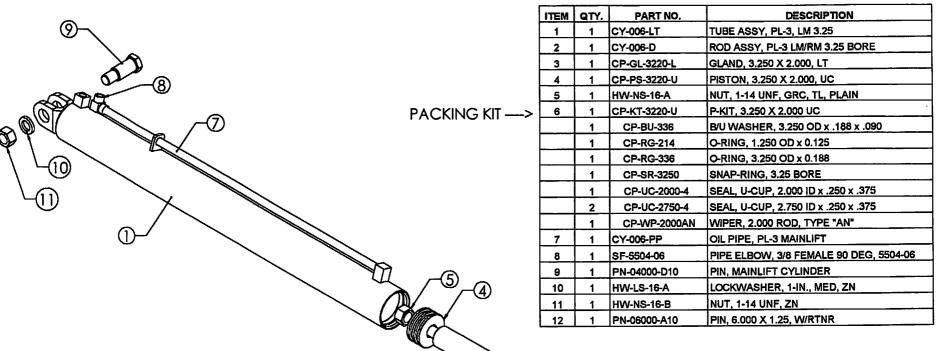
MILLER LOADERS INC. **SCHEMATIC**

RIGHT BUCKET CYLINDER PL-2 and PL-3 PART NO: CY-004-R

DWG. NO.	CY-00	04-R			rev. O
DRAWN BY TD	M DATE	22 MAY 01	SHEET 1	OF	1_

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COMPLETE CYLINDER PART NO: CY-006-L



NOTES:

1. ITEMS 9, 10, 11, AND 12 ARE SOLD SEPARATELY.

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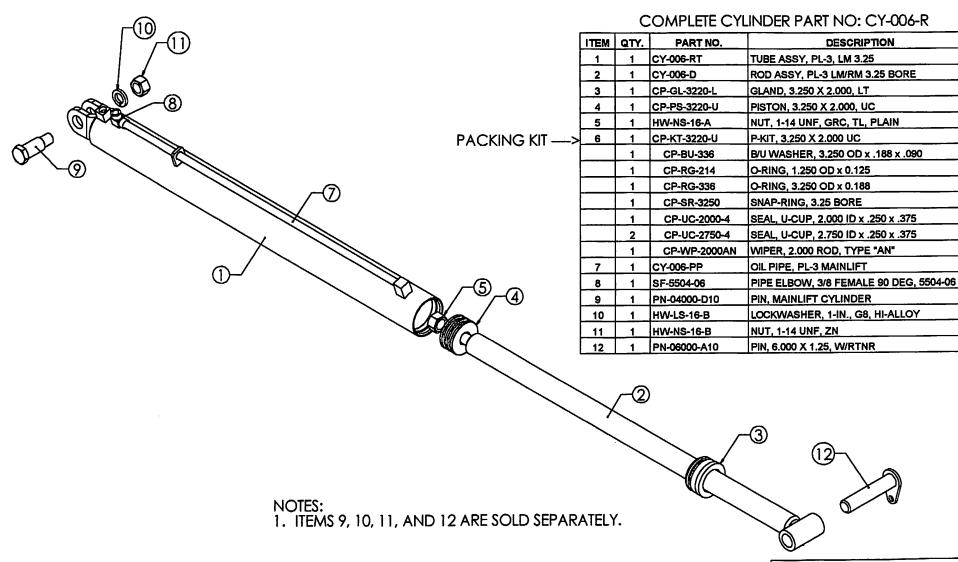
MILLER LOADERS INC.

SCHEMATIC

LEFT MAINLIFT CYLINDER PL-3 PART NO: CY-006-L

DWG. NO. CY-006-L REV. 0

DRAWN BY TDM DATE 22 MAY 01 SHEET 1 OF 1



MILLER LOADERS INC. SCHEMATIC			
RIGHT MAINLIFT CYLINDER PL-3 PART NO: CY-006-R			
Dec.			

DWG. NO. CY-006-R REV.

DRAWN BY TDM DATE 22 MAY 01 SHEET 1 OF 1

COMPLETE ASSEMBLY PART NO: HY-AU-03

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ITEM	PART NO.	DESCRIPTION
1	HP03-GP-01	PIPE, HYD, PL-3 GRAPPLE, LONG
	HP03-GP-01	PIPE, PL-3 GRAPPLE, 67.50 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	HP03-GP-02	PIPE, HYD, PL-3 GRAPPLE, SHORT
	SF-2500-08-08	UNION ELBOW, 90 DEG, 2500-08-08
	SF-0304-08	FLARE NUT, 1/2-IN JIC, LONG, 304-08
	HP03-GP-02	PIPE, PL-3 GRAPPLE, 66.25 LONG
3	HS-06-024-A	HOSE, 3/8, 8MJ-8MJ, 24-IN. LONG
4	HP01-UR-01	PIPE, HYD, UPRIGHT 21-INCH
	HP01-UR-01	PIPE, UPRIGHT, 21-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
_ 6	HS-06-011-A	HOSE, 3/8, 6MPX90-8FJX, 11-IN. LONG
7	MF02-16	OIL BLOCK, GRAPPLE
8	PF-CN06	CLOSE NIPPLE, 1/2
9	HA-TP-4010-3	TIP, MALE 3/8 NPT
10	HA-TP-4050-3	TIP, FEMALE 3/8 NPT
11	MF02-22	PIPE CLAMP, PLATE LOADER
12	HW-LS-05-A	LOCKWASHER, 5/16, ZN
13	HW-BS-05-0100-A	BOLT, 5/16-18 X 1 UNC, G5 ZN

NOTE: TWO SUPPLY HOSES ARE ALSO SUPPLIED WITH THE KIT. THE LENGTH REQUIRED DEPENDS ON THE TRACTOR. 1)1213 THIS OIL BLOCK IS SUPPLIED WITH

ALL LOADERS. IT IS WELDED TO THE

LARGE CROSS-BAR ON THE MAINFRAME.

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MILLER LOADERS INC. **SCHEMATIC**

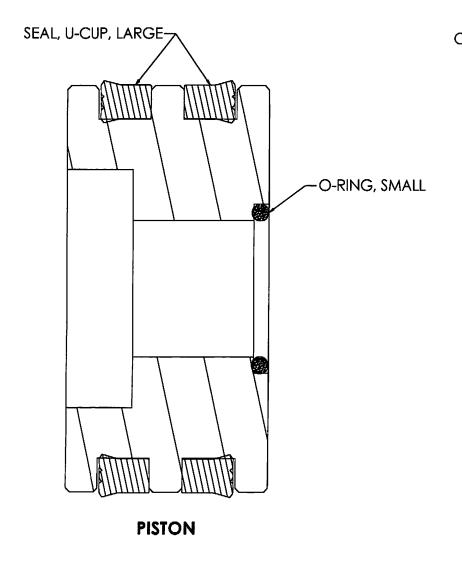
AUXILLARY OIL LINE KIT, PL-3 LOADER PART NO: HY-AU-03

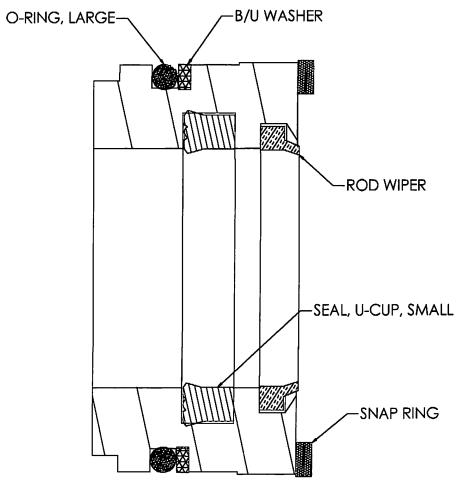
DRAWN BY TOM DATE 25 MAY 01 SHEET 1 OF 1

ΑU

DWG. NO.

REV.





GLAND

MILLER LOADERS INC. SCHEMATIC			
PACKING KIT ASSEMBLY U-CUP STYLE			
DWG, NO. CP-KT-U	REV.		
DRAWN BY TDM DATE 21 MAY 01 SHEET 1 C	_F 1		

PL-3 SPECIFICATIONS

Loader Lift Capacity to Full Height Loader Breakaway Force

5500 lbs. 7300 lbs.

Lift Capacities Based on Hydraulic Pressure at the Cylinders of 2600 PSI and load placed 16 inches behind Cutting Edge. Deduct 500 pounds from these values if a Grapple Fork is mounted on the bucket

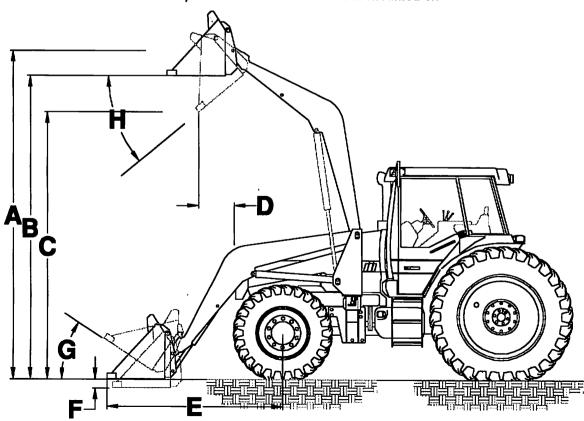
Dimensions

A -	Maximum Pin height	15 ft. 0 in.		
B -	Clearance with Bucket Level	13 ft. 10 in.		
C -	Clearance with Bucket Dumped	12 ft. 9 in.		
D -	Reach at Maximum height	24 in.		
E-	Reach when Bucket on Ground	90-95 in.**		
F-	Dig	5.5 in.		
G -	Roll-Back Angle when Bucket on Ground	31 deg.		
H -	Dump Angle at Maximum height	44 deg.		
	Shipping Weight	3600 lbs.		
	Bucket Width/Capacity (level/heaped)	96 in./ 1.2 yd.(1.5 yd.)		

Hydraulic Cycle Times

Raise to Full height	7.5 sec.
Lower from Full height	6.0 sec.
Dump Bucket from Cupped Position	3.2 sec.
Cup Bucket from Dumped Position	3.0 sec.

Specifications Based on flow rate of 22 GPM **Depends on tractor that loader is mounted on





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

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