

Level Best

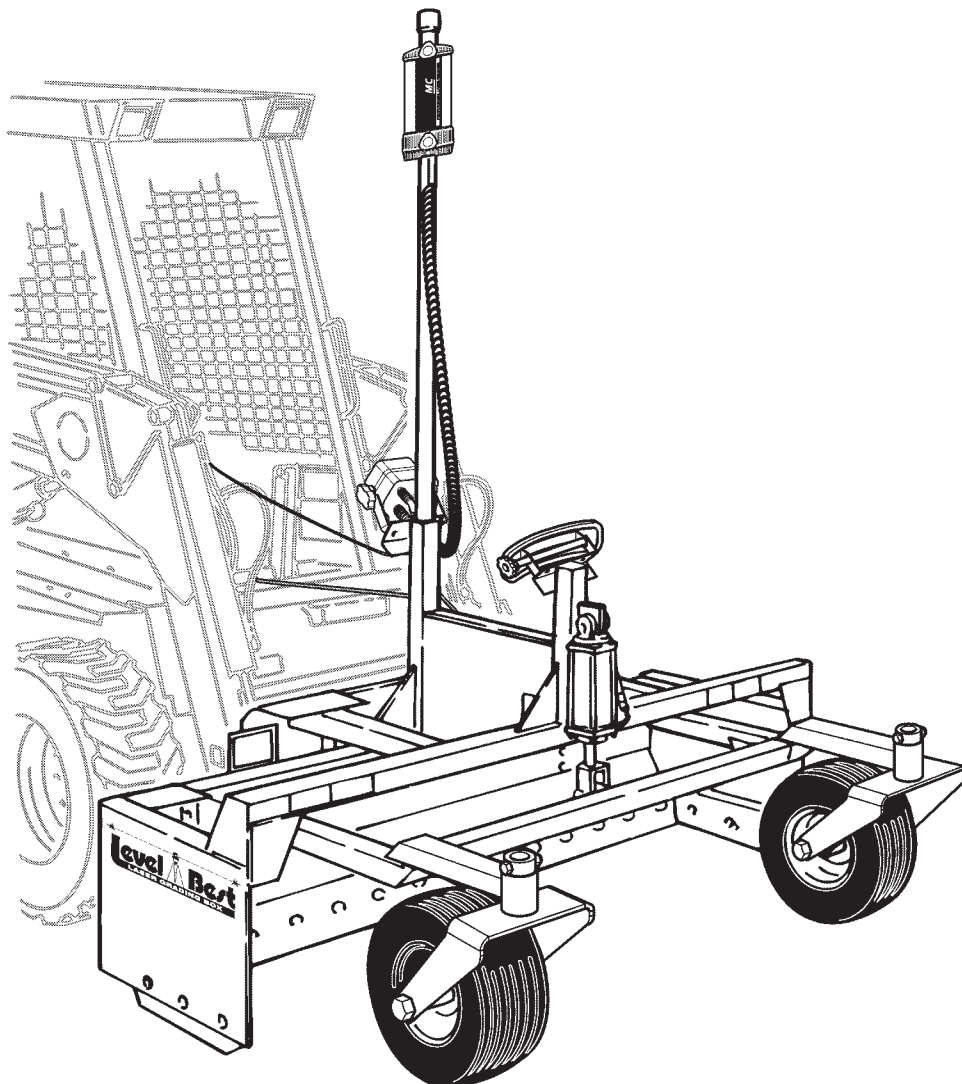
LASER GRADING BOX

PARTS MANUAL

FOR

SKID STEER - SINGLE

APACHE



ATI Corporation

New Holland, PA 17557

Phone (717) 354-8721 • FAX (717) 354-2162

1-800-342-0905

www.level-best.com

JANUARY 2006

CAT.# LBSSLGBPM-A-0106

COPYRIGHT 2006 by
ATI Corporation
250 Earland Drive
New Holland, PA 17557 U.S.A.

DISCLAIMER

THE INFORMATION IN THIS MANUAL IS PROVIDED TO PROMOTE THE SAFE USE OF, AND ASSIST THE OPERATOR IN ACHIEVING THE BEST PERFORMANCE FROM, LASER GRADING BOX DESCRIBED HEREIN, FOR THEIR INTENDED APPLICATIONS.



LASER GRADING BOX

ATI Corporation

New Holland, PA 17557

Phone (717) 354-8721 • FAX (717) 354-2162

1-800-342-0905

www.level-best.com

Laser Grading Box PARTS LIST

STANDARD MODELS

Part Number	Model Number	Description
315-046-000	LBSS6	Box, Grader, Skid Steer, Single, 6', Cylinder Only
315-047-000	LBSS7	Box, Grader, Skid Steer, Single, 7', Cylinder Only
315-048-000	LBSS8	Box, Grader, Skid Steer, Single, 8', Cylinder Only
000-166-360		Kit, Hydraulic, Single, Apache, Includes Valve Assembly, Hoses, Fittings & Solenoid Cable
000-200-096		Kit, Laser Controls, Single, Skid Steer, Includes Single Panel, 360 Degree Sensor & Cables (Remote, Power, Sensor & Solenoid)

Laser Grading Box PARTS LIST



LASER GRADING BOX

ATI Corporation

New Holland, PA 17557

Phone (717) 354-8721 • FAX (717) 354-2162

1-800-342-0905

www.level-best.com

TABLE OF CONTENTS

SUBJECT

PAGE NO.

WARRANTY	iv
SERIAL NUMBER INFORMATION	iv
WHERE TO GET PARTS AND SERVICE	iv
HOW TO ORDER PARTS	v
NOTES	vi
LIST OF PARTS ILLUSTRATIONS	1



Laser Grading Box PARTS LIST

WARRANTY

This Laser Grading Box is designed and manufactured to high quality standards. ATI Corporation, therefore, guarantees this Laser Grading Box to be free from defect in workmanship and materials for three years from purchase date. **If the machine is used for rental purposes, the warranty is limited to ninety (90) days.**

Vendored Components and Control Valve Parts are warranted separately by their respective manufacturers.

Does not cover normal wear or failure due to hydraulic oil contamination.

Misuse, abuse, misapplication, and unauthorized alterations will void this warranty.

SERIAL NUMBER INFORMATION

It is very important that the correct serial number is provided when ordering parts. The serial number plate is located on the main frame. Please mark the model and serial number of your Laser Grading Box in the space provided below in case the plate on your Laser Grading Box gets lost or damaged.

Model **Serial Number**

Dealer Name **Dealer Phone Number**

WHERE TO GET PARTS AND SERVICE

When replacement parts and service are required for your Laser Grading Box, ATI Corporation recommends going to your local Laser Grading Box dealer. By going to your local dealer you are dealing with people that understand and know your machine. Our dealers have experience servicing these machines and stock the most popular parts required to keep your Laser Grading Box in top working condition.

NOTE:

ATI Corporation reserves the right to discontinue models at any time, change specifications, and improve design without notice and without incurring obligation on goods previously purchased and to discontinue supplying any part listed, when the demand does not warrant production.

Laser Grading Box PARTS LIST



HOW TO ORDER PARTS

Parts lists contained in this book have been prepared to help you when ordering spare and/or replacement parts. Your order will be filled promptly and accurately when the following information is provided:

1. Model and serial number of the unit. (This specifically identifies the equipment you have and permits us to verify the part numbers in your order.)
2. The parts list page number and catalog number. Include catalog revision number, if applicable.
3. The **Item** number for each part. **Item** numbers on the parts list page correspond with the numbers shown on the illustration.
4. **Part Number** as it appears in the parts list. In most cases this will be a nine-digit number; for example: 315-005-000.
5. The **Description** for the part as it appears on the parts list page.

When a complete assembly is needed, use the assembly number given in the parts list. If no assembly number is given, order by main assembly title and list only the item numbers you want. For example: “Wheel Frame Assembly per 315-509-000, Items 2 through 8, inclusive”.

The part ordered may have a new part number, or the part may have been replaced by a newer design with a different part number. In these cases your acknowledgement, shipping papers and invoices will be written listing the current part number first; the old part number you referred to will follow the part description.

Our purpose in doing this is to tell you that the parts are fully interchangeable. This will avoid any unnecessary correspondence or delay in processing your order. We suggest that you add any new number to your parts lists for future use.

Laser Grading Box PARTS LIST

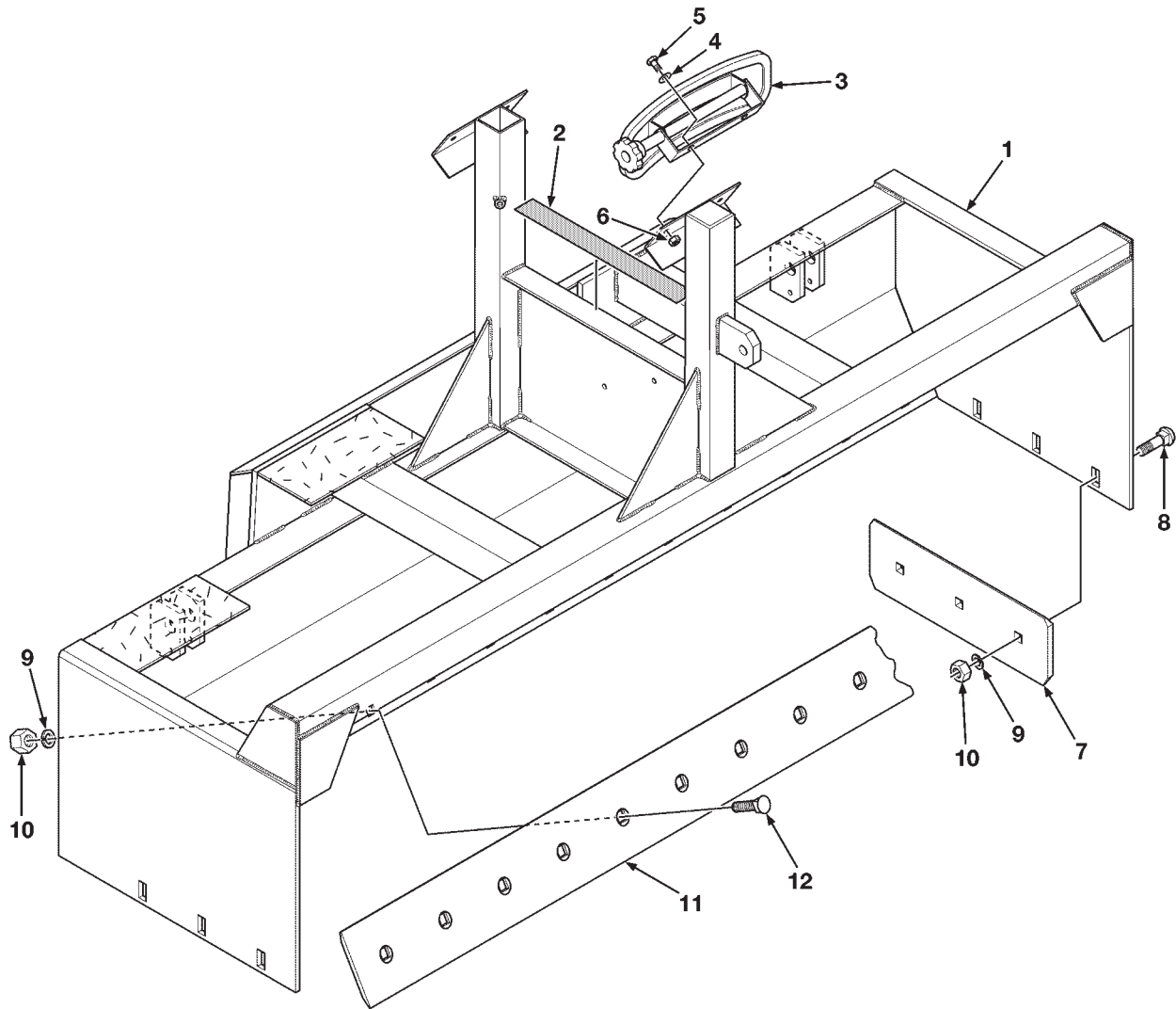


LIST OF PARTS ILLUSTRATIONS

Figure 1.	Main Frame and Cutting Edges	2
Figure 2.	Wheel Frame	4
Figure 3	Caster Fork and Wheel	6
Figure 4.	Hydraulics	8
Figure 5.	Hydraulic Valve Assembly	10
Figure 6.	Laser Controls	12
Figure 7.	Control Panel, Sensor, Cables and Related Parts	14
Figure 8.	Cylinder Assembly	16
Figure 9.	Decals	18

Laser Grading Box PARTS LIST

Figure 1. Main Frame and Cutting Edges



Laser Grading Box PARTS LIST



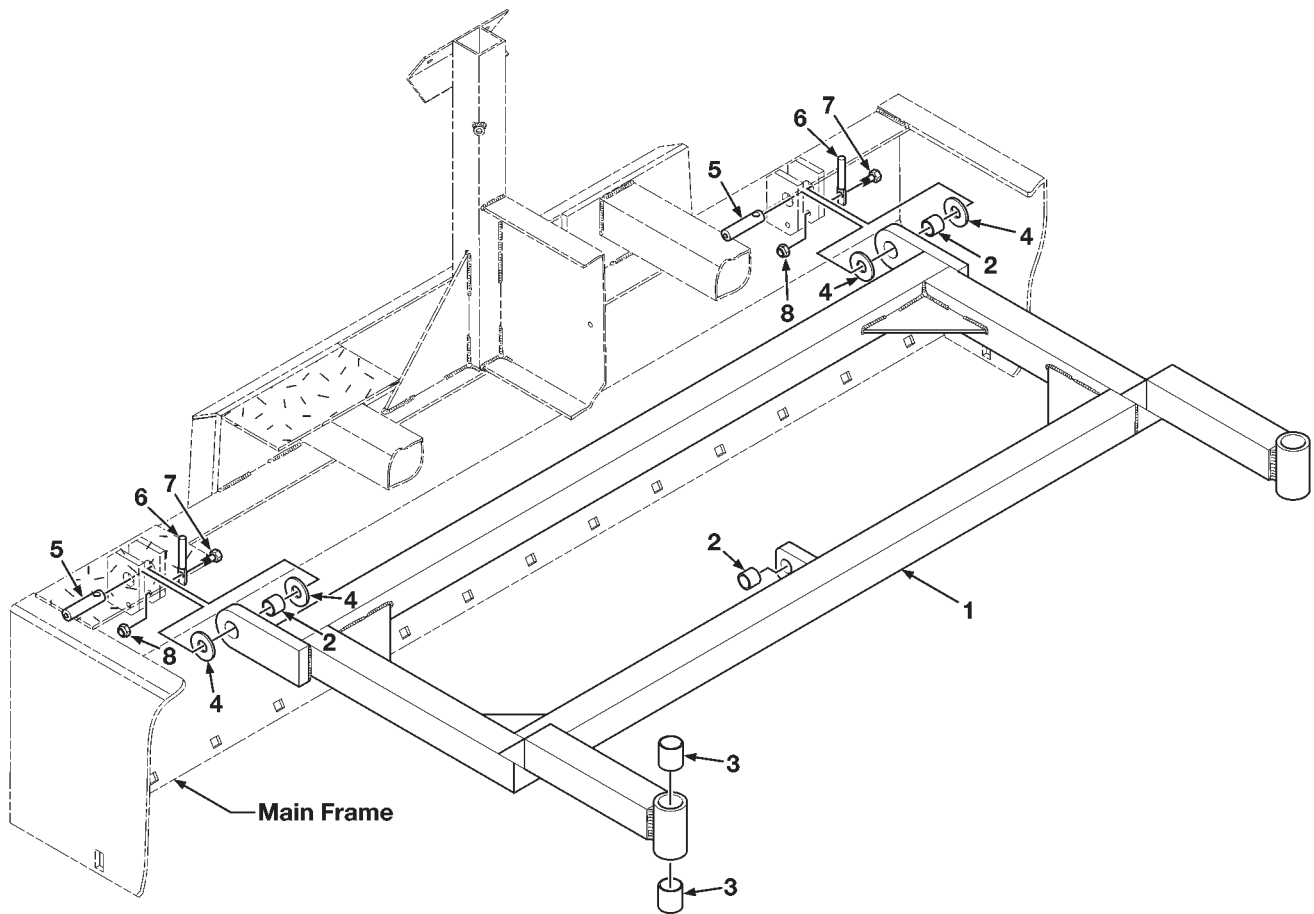
Figure 1. Main Frame and Cutting Edges

Item	Part No.	Qty	Description
1	315-521-000	1	Frame, Main, Skid Steer, 6'
	315-522-000	1	Frame, Main, Skid Steer, 7'
	315-523-000	1	Frame, Main, Skid Steer, 8'
2	LP	AR	Skid Grip
3	001-001-051	1	Mirror
4	LP	2	Washer, Flat, 3/8", SAE
5	LP	2	Bolt, Hex Head, 3/8"-16UNC x 1" Long
6	LP	2	Nut, Hex, Nylon Lock, 3/8"-16UNC
7	000-190-072	2	Edge, Cutting, End, DBF, 19-1/2" Long
8	000-150-265	6	Bolt, Carriage, 5/8"-11UNC x 2" Long
9	000-155-077	AR	Washer, Lock, 5/8"
10	000-158-138	AR	Nut, Hex, 5/8"-11UNC
11	000-190-075	1	Edge, Cutting, DBF, 72" Long
	000-190-077	1	Edge, Cutting, DBF, 84" Long
	000-190-079	1	Edge, Cutting, DBF, 96" Long
12	000-150-263	AR	Bolt, Plow, 5/8"-11UNC x 2" Long

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase

Laser Grading Box PARTS LIST

Figure 2. Wheel Frame



Laser Grading Box PARTS LIST



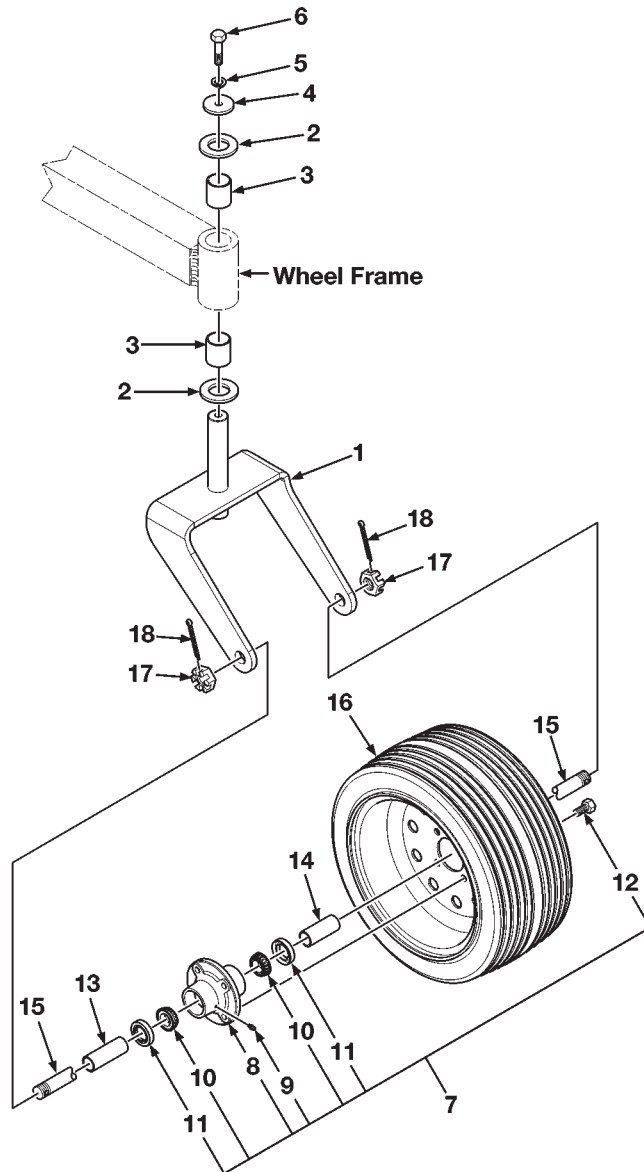
Figure 2. Wheel Frame

Item	Part No.	Qty	Description
1	315-520-000	1	Frame, Wheel, Skid Steer, 6', 7' & 8' Includes Items 2 & 3
2	000-176-174	3	Bushing, Wheel Frame, 1-1/4" OD x 1" ID x 1" Long
3	000-176-171	4	Bushing, Wheel Frame, 1-3/4" OD x 1-1/2" ID x 1-1/2" Long
4	000-155-003	4	Washer, Flat, 1-1/2" OD x 1" ID x 14 Gauge Thick
5	000-161-065	2	Pin, Pivot, 1" Dia. x 3-1/4" Long
6	000-161-024	2	Pin, Retainer, 3/8" Dia. x 3-1/4" Long
7	LP	2	Bolt, Hex Head, 5/16"-18UNC x 1-1/4" Long
8	LP	2	Nut, Hex, Nylon Lock, 5/16"-18UNC

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase

Laser Grading Box PARTS LIST

Figure 3. Caster Fork and Wheel



Laser Grading Box PARTS LIST



Figure 3. Caster Fork and Wheel

Item	Part No.	Qty	Description
1	315-548-000	2	Fork, Caster
2	000-155-002	4	Washer, Flat, 2-1/4" OD x 1-1/2" ID x 10 Gauge Thick
3	000-176-171	4	Bushing, Wheel Frame, 1-3/4" OD x 1-1/2" ID x 1-1/2" Long
4	000-155-004	2	Washer, Flat, 2-1/4" OD x 17/32" ID x 1/4" Thick
5	LP	2	Washer, Lock, 1/2"
6	LP	2	Bolt, Hex Head, 1/2"-13UNC x 1-1/4" Long
7	001-001-069	2	Bearing Assembly, Includes Items 8 thru 12
8	001-001-074	1	Hub, Wheel, With Outer Race
9	LP	1	Fitting, Lube, Drive
10	000-176-184	2	Bearing, Roller, Tapered, 1" Dia. Bore
11	000-166-302	2	Seal, Grease, 2" OD x 1-1/4" ID
12	LP	4	Bolt, Hex Head, 1/2"-20UNF x 1" Long
13	315-551-000	2	Spacer, Wheel Bearing, Long
14	315-552-000	2	Spacer, Wheel Bearing, Short
15	315-553-000	2	Shaft, Axle, Wheel, Roller Bearing
16	001-001-072	2	Wheel/Tire, 18/8.50-12, Low Profile
17	000-158-193	4	Nut, Castle, 1"-14UNF
18	LP	4	Pin, Cotter, 1/8" Dia. x 1-1/4" Long

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase

Laser Grading Box PARTS LIST

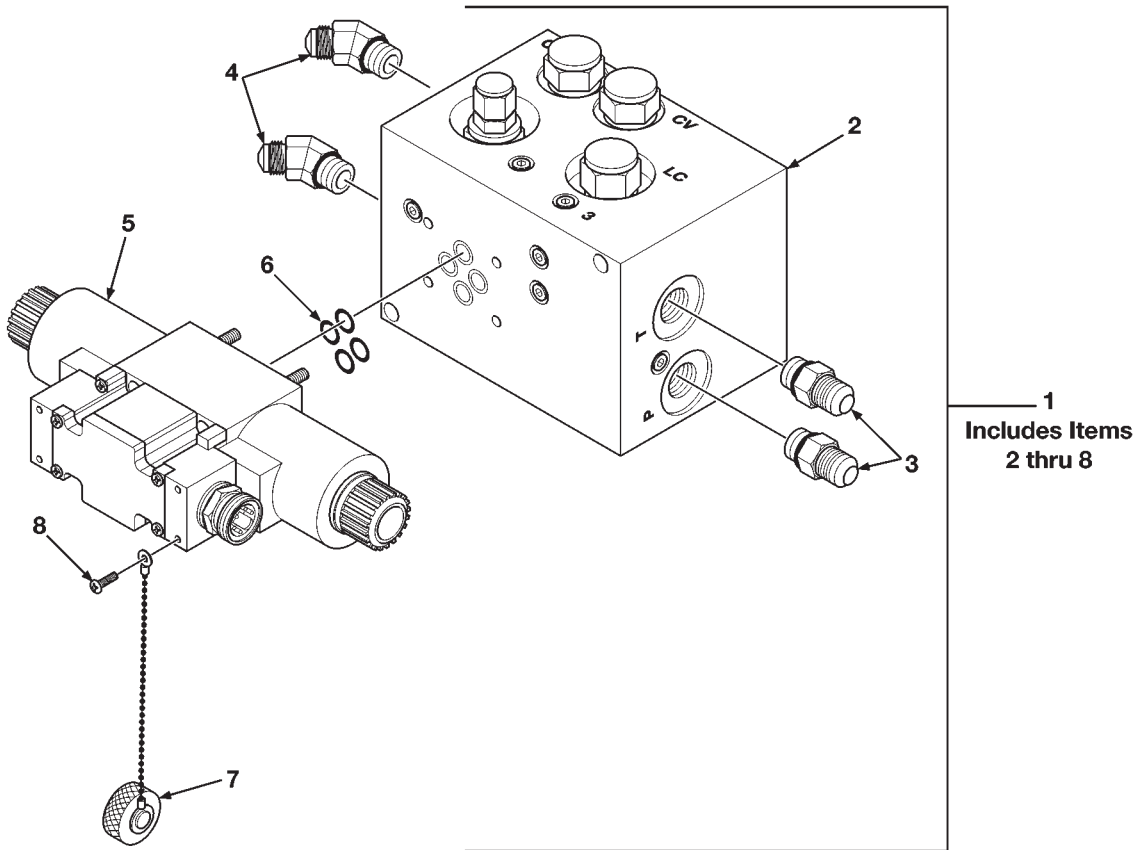


Figure 4. Hydraulics

Item	Part No.	Qty	Description
1	000-166-353	1	Valve Assembly, Hydraulic, Includes Items 2 & 3, See Breakdown Figure 5
2	000-166-170	2	Adapter, Straight, 8MJ x 8MB
3	000-166-175	2	Elbow, 45°, 6MJ x 6MB
4	LP	4	Washer, Flat, 5/16", SAE
5	LP	2	Bolt, Hex Head, 5/16"-18UNC x 5" Long
6	LP	2	Nut, Hex, Nylon Lock, 5/16"-18UNC
7	000-166-185	1	Hose, 3/8" Dia. x 28" Long x 6FJX x 8FJX90, 3,000 PSI
8	000-166-185	1	Hose, 3/8" Dia. x 28" Long x 6FJX x 8FJX90, 3,000 PSI
9	000-166-170	2	Adapter, Straight, 8MJ x 8MB
10	000-176-174	1	Bushing, Wheel Frame, 1-1/4" OD x 1" ID x 1" Long
11	000-166-181	1	Cylinder, Hydraulic, 3" Bore x 6" Stroke, See Breakdown Figure 8 Includes Items 12 & 13
12	000-161-068	2	Pin, Cylinder, 1" Dia. x 3-3/8" Long
13	LP	4	Pin, Cotter, 3/16" x 1-3/4" Long
14	000-166-187	1	Hose, 1/2" Dia. x 58" Long x 8FJX x 8FJX45, 3,000 PSI
15	000-166-187	1	Hose, 1/2" Dia. x 58" Long x 8FJX x 8FJX45, 3,000 PSI
16	000-166-202	2	Adapter, Straight, 8MJ x 12MB
17	000-166-068	1	Coupler, Quick Disconnect, Flat Face, Male (Tank Line)
18	000-166-069	1	Coupler, Quick Disconnect, Flat Face, Female (Pressure Line)
19	000-200-118	1	Cable, Solenoid, 90° Connector, 3' Long
			BH-Bulkhead MP-Male Pipe FP-Female Pipe FPX-Female Pipe Swivel MB-Male O-Ring Boss FB-Female O-Ring Boss MJ-Male JIC FJ-Female JIC FJX-Female JIC Swivel
<p>AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase</p>			

Laser Grading Box PARTS LIST

Figure 5. Hydraulic Valve Assembly



Laser Grading Box PARTS LIST



LASER GRADING BOX

ATI Corporation

New Holland, PA 17557

Phone (717) 354-8721 • FAX (717) 354-2162

1-800-342-0905

www.level-best.com

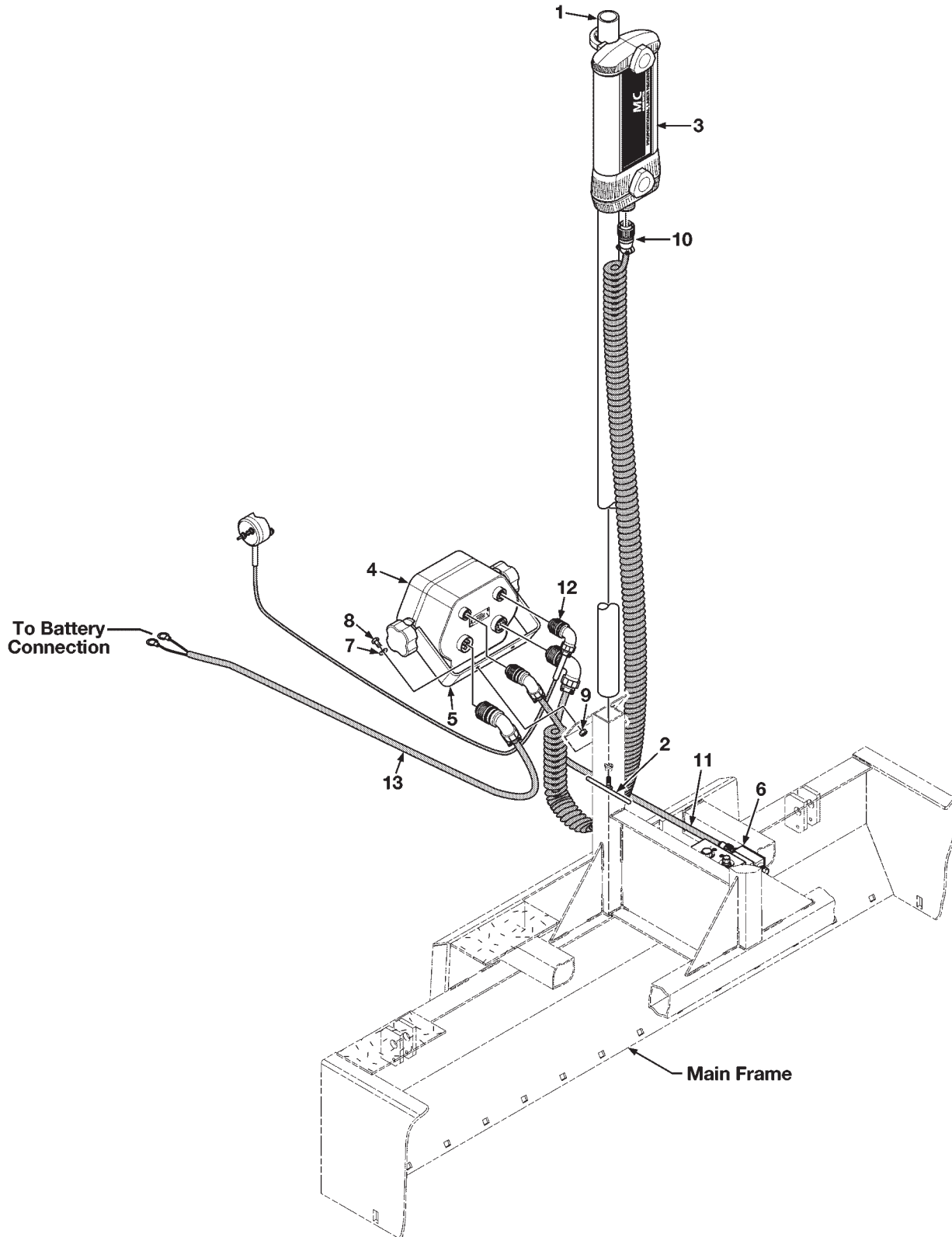
Figure 5. Hydraulic Valve Assembly

Item	Part No.	Qty	Description
1	000-166-353	1	Valve Assembly, Hydraulic, Includes Items 2 thru 8
2	NSS	1	Manifold Block, Single
3	000-166-170	2	Adapter, Straight, 8MJ x 8MB
4	000-166-175	2	Elbow, 45°, 6MJ x 6MB
5	000-166-352	1	Valve, Directional, Includes Item 6
6	LP	4	O-Ring, Directional Valve
7	001-001-060	1	Cap, Quick Disconnect, with Chain
8	LP	1	Screw, Pan Head, Phillips, #6-32UNC x 1/2" Long

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase

Laser Grading Box PARTS LIST

Figure 6. Laser Controls



Laser Grading Box PARTS LIST



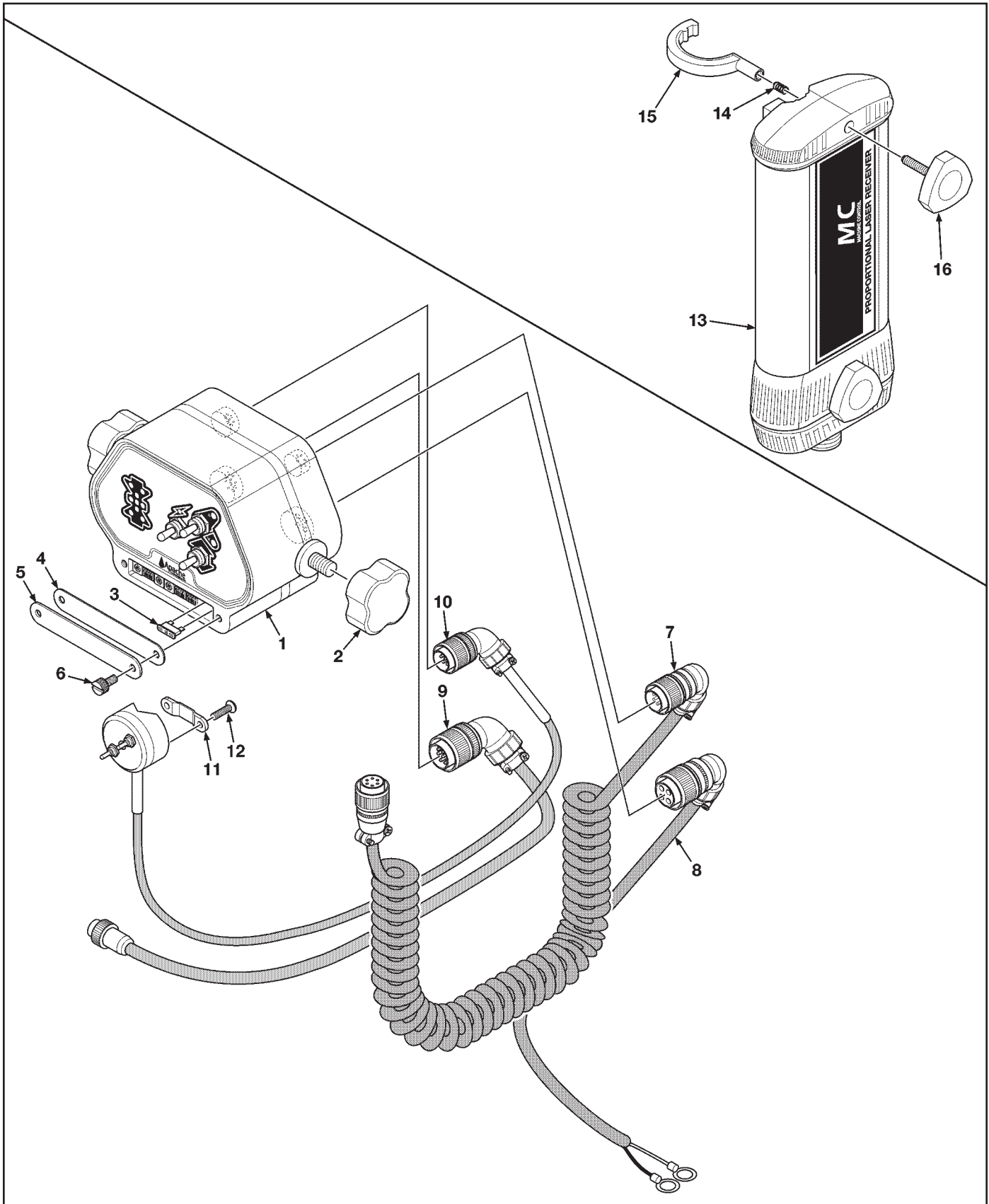
Figure 6. Laser Controls

Item	Part No.	Qty	Description
1	001-001-052	1	Pole, Mast
2	001-001-053	1	Handle, Tee
3	000-200-093	1	Sensor, Bullseye 5MC
4	000-200-092	1	Panel Assembly, Single, See Breakdown Figure 7
5	001-001-075	1	Bracket, Control Panel
6	000-166-353	1	Valve Assembly, Hydraulic
7	LP	2	Washer, Flat, 7/16", SAE
8	LP	2	Bolt, Hex Head, 7/16"-14UNC x 1" Long
9	LP	2	Nut, Hex, Nylon Lock, 7/16"-14UNC
10	000-200-099	1	Cable, Sensor, Coiled, 15' Long
11	000-200-118	1	Cable, Solenoid, 90° Connector, 3' Long
12	000-200-098	1	Switch Assembly, Remote, Auto/Manual, Raise/Lower
13	000-200-097	1	Cable, Power, 2-Wire, 20' Long

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase

Laser Grading Box PARTS LIST

Figure 7. Control Panel, Sensor, Cables and Related Parts



Laser Grading Box PARTS LIST



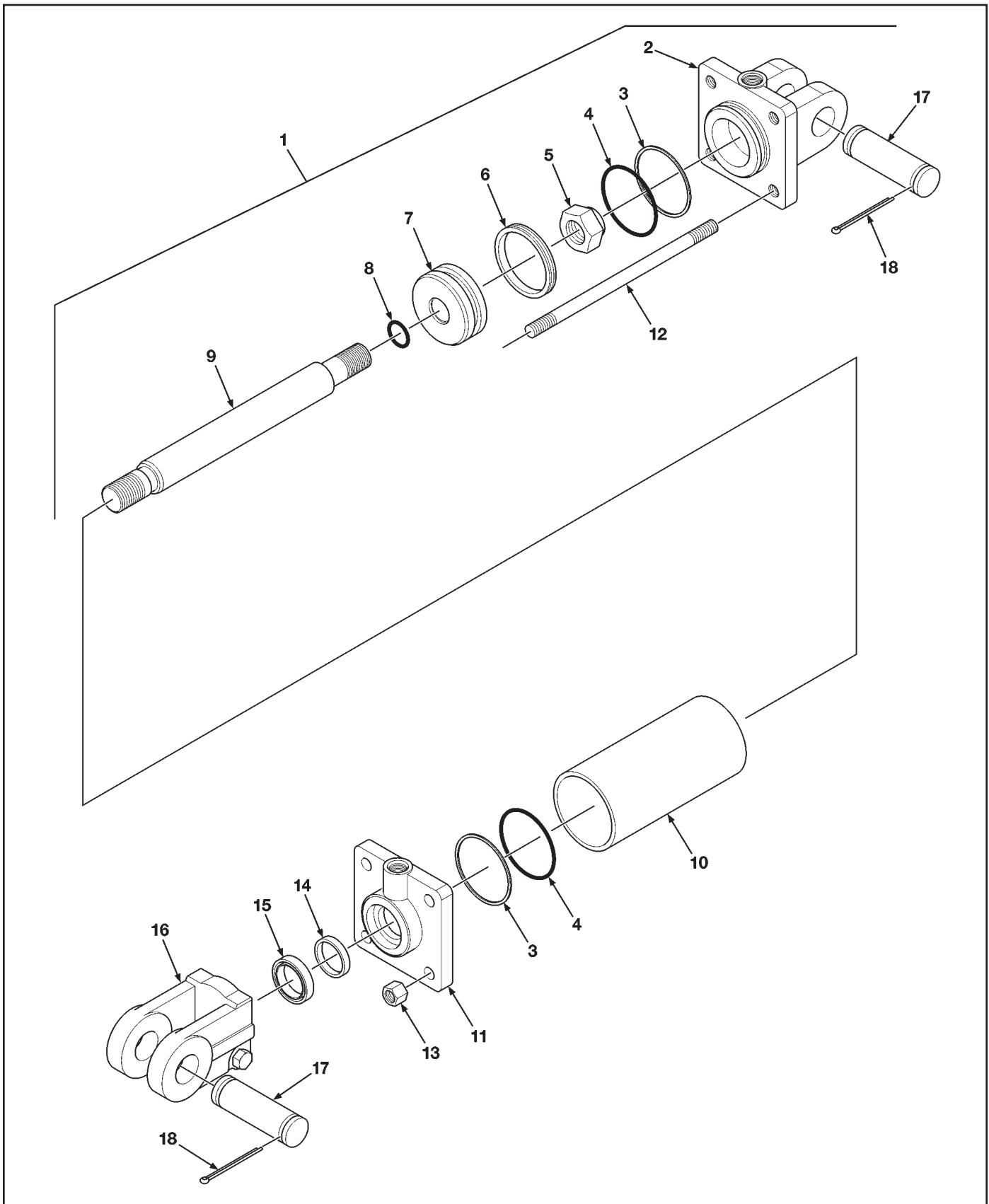
Figure 7. Control Panel, Sensor, Cables and Related Parts

Item	Part No.	Qty	Description
1	000-200-092	1	Panel, Control, Single, Includes Items 2 thru 6
2	000-200-112	2	Knob
3	LP	1	Fuse, 25 Amp
4	000-200-115	1	Gasket, Front Cover Plate
5	000-200-114	1	Plate, Front Cover
6	000-200-113	2	Screw, Thumb
7	000-200-099	1	Cable, Sensor, Coiled, 15' Long
8	000-200-097	1	Cable, Power, 2-Wire, 20' Long
9	000-200-118	1	Cable, Solenoid, 90° Connector, 3' Long
10	000-200-098	1	Switch Assembly, Remote, Auto/Manual, Raise/Lower, Includes Items 11 & 12
11	NSS	1	Clamp
12	NSS	2	Screw
13	000-200-093	1	Sensor, Bullseye 5MC, Includes Items 14 thru 16
14	000-161-094	2	Spring, Clamp, Compression
15	000-200-108	2	Clamp, Universal, 2" Dia.
16	000-200-107	2	Knob, Clamp

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase

Laser Grading Box PARTS LIST

Figure 8. Cylinder Assembly



Laser Grading Box PARTS LIST



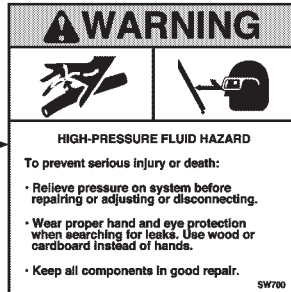
Figure 8. Cylinder Assembly

Item	Part No.	Qty	Description
1	000-166-181	1	Cylinder Assembly, 3" Bore x 6" Stroke, Includes Items 2 thru 18
2	000-166-322	1	Butt Assembly
3	NSS	2	Ring, Back Up
4	NSS	2	O-Ring
5	000-158-195	1	Nut, Lock
6	NSS	1	Seal, Crown
7	000-166-326	1	Piston
8	NSS	1	O-Ring
9	000-166-328	1	Rod Assembly
10	000-166-329	1	Tube
11	000-166-330	1	Gland
12	000-166-331	4	Tie Rod Assembly, Includes Item 13
13	NSS	4	Nut, Hex, Tie Rod
14	NSS	1	Seal, U-Cup
15	NSS	1	Seal, Wiper
16	000-166-334	1	Clevis Assembly
17	000-161-068	2	Pin, Cylinder, 1" Dia. x 3-3/8" Long
18	LP	4	Pin, Cotter, 3/16" Dia. x 1-3/4" Long
	000-166-207	AR	Kit, Cylinder Repair Includes: Items 3, 4, 6, 8, 14 & 15

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase

Laser Grading Box PARTS LIST

Figure 9. Decals



Laser Grading Box PARTS LIST



LASER GRADING BOX

ATI Corporation

New Holland, PA 17557

Phone (717) 354-8721 • FAX (717) 354-2162

1-800-342-0905

www.level-best.com

Figure 9. Decals

Item	Part No.	Qty	Description
1	000-186-045	2	Decal, Level Best Logo
2	000-186-041	1	Decal, Warning, High Pressure
3	000-186-051	2	Decal, Danger, Pinch Point
4	000-186-047	2	Decal, Danger, This Machine Starts & Stops Automatically
5	000-186-049	1	Decal, Danger, Do Not Enter....
6	000-186-048	1	Decal, Made in U.S.A.
7	000-186-050	1	Decal, No Step
8	000-186-035	1	Plate, Model/Serial, Adhesive Back

AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase