

Level Best

LASER GRADING BOX

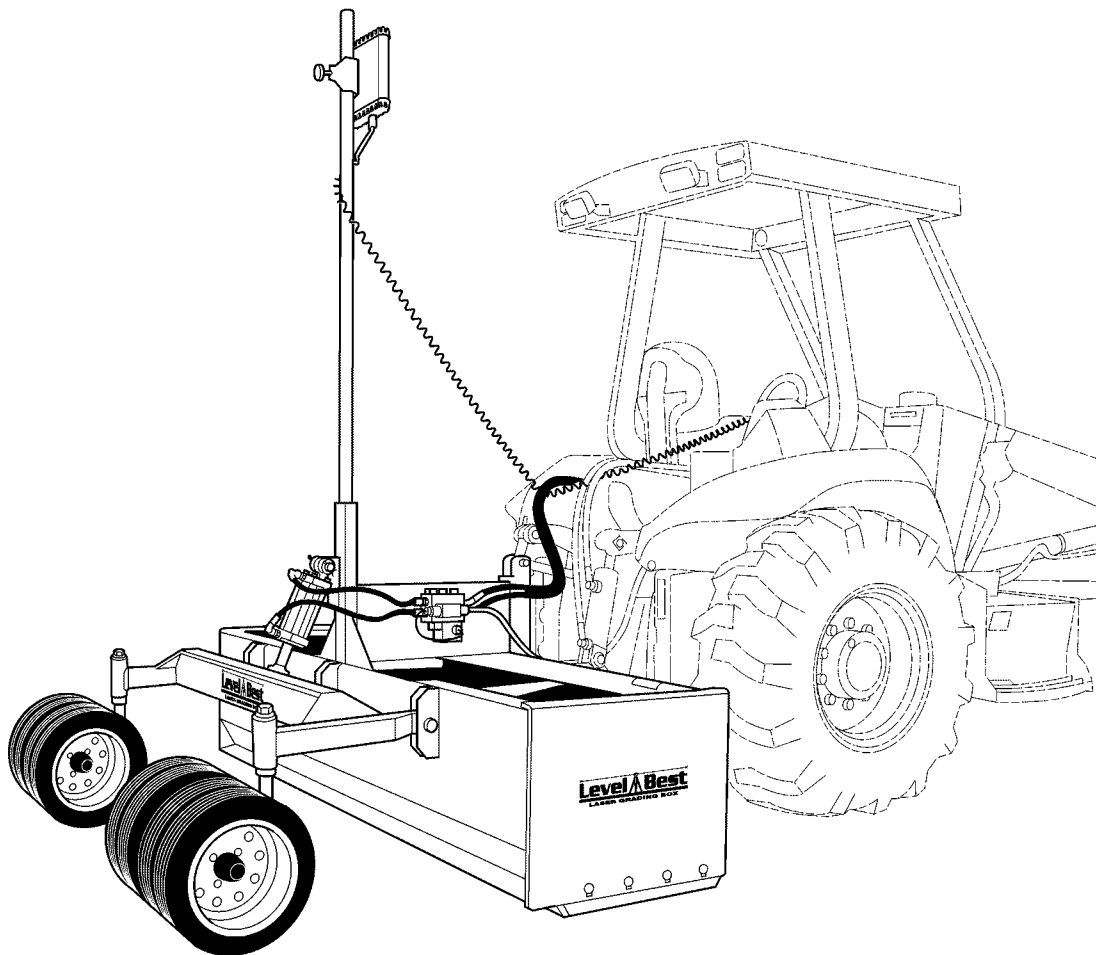
PARTS MANUAL

FOR

TRACTOR BOX - SINGLE

SUPER CAPACITY

LASER ALIGNMENT



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.#LBSELGBPM-L-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.



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
315-066-000	LBSE7	Box, Grader, Tractor, Single, 7', Cylinder Only
315-064-000	LBSE8	Box, Grader, Tractor, Single, 8', Cylinder Only
315-065-000	LBSE9	Box, Grader, Tractor, Single, 9', Cylinder Only
000-166-293		Kit, Hydraulic, Super Capacity, Laser Alignment, Includes Valve Assembly, Hoses and Fittings
000-200-054		Kit, Laser Controls, Single Tractor, Includes Single Panel, 360 Degree Sensor, & Cables (Power, Sensor & Solenoid)

Laser Grading Box PARTS LIST

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



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

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



LASER GRADING BOX

ATI Corporation

New Holland, PA 17557

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

1-800-342-0905

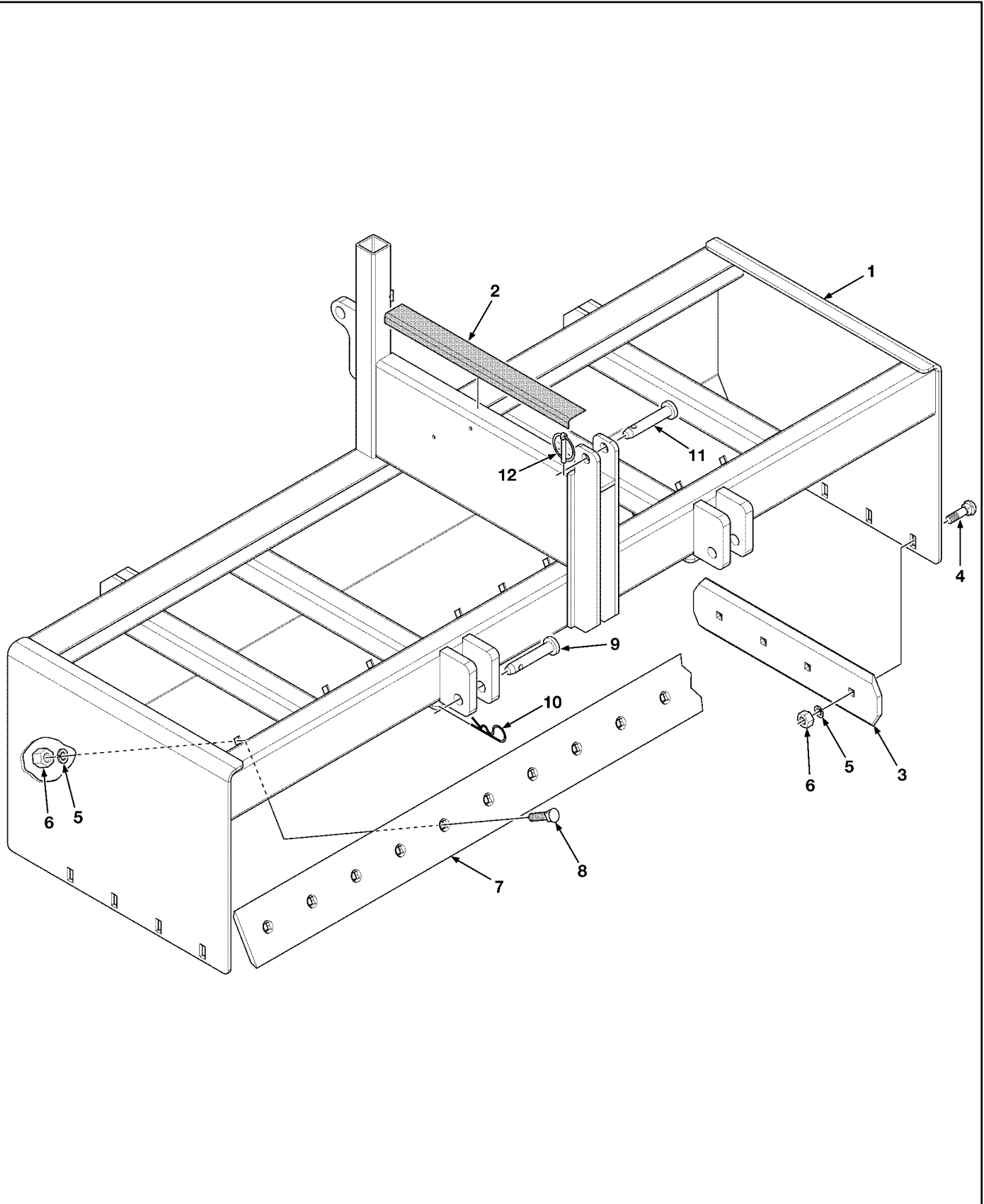
www.level-best.com

LIST OF PARTS ILLUSTRATIONS

Figure 1.	Main Frame and Cutting Edges	2
Figure 2.	Wheel Frame	4
Figure 3.	Caster, Axle, Wheel and Related Parts	6
Figure 4.	Hydraulics	8
Figure 5.	Hydraulic Valve Assembly	10
Figure 6.	Laser Sensor and Control Panel	12
Figure 7.	Control Panel and Cables	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

Level Best
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

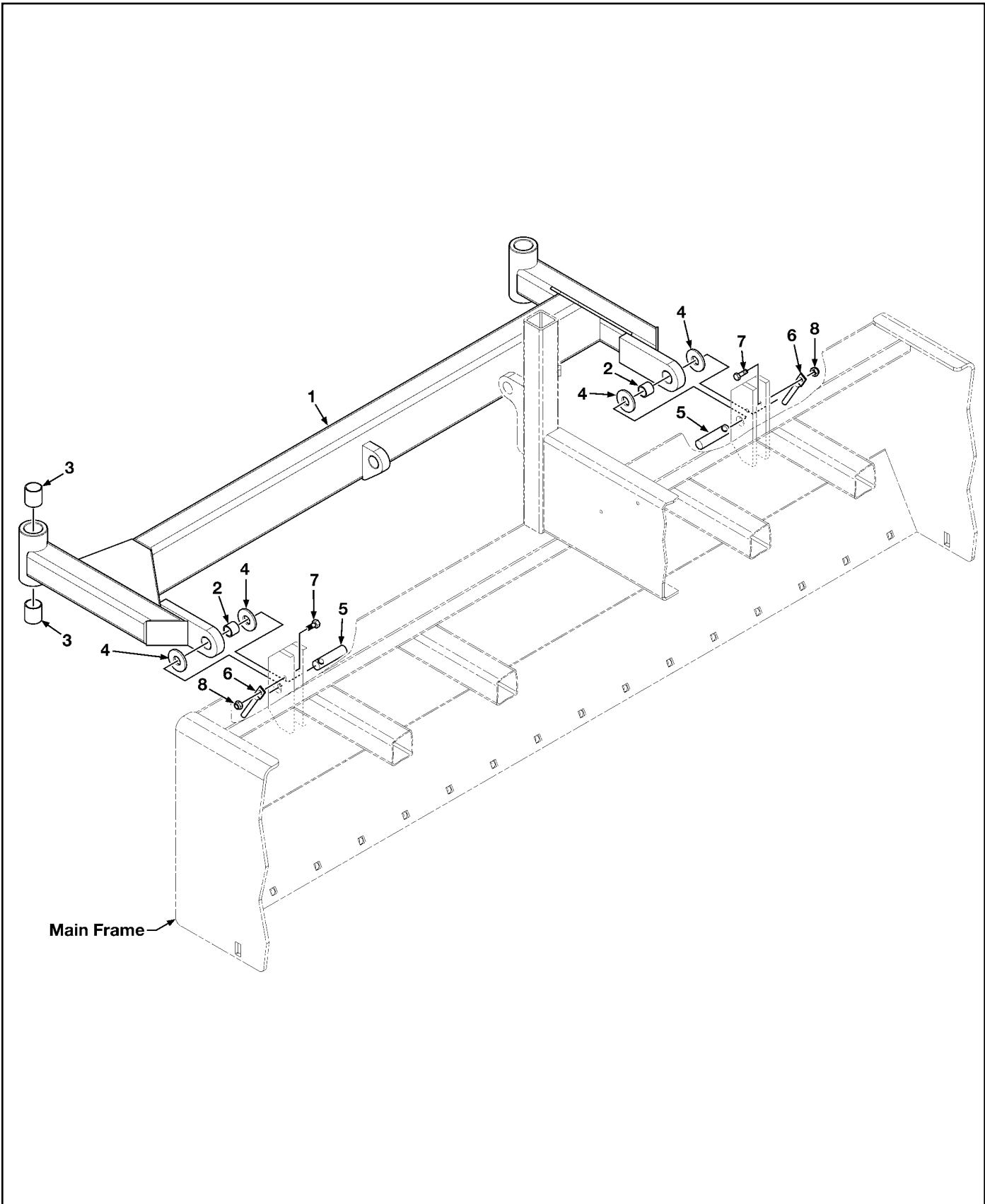
Figure 1. Main Frame and Cutting Edges

Item	Part No.	Qty	Description
1	315-066-100	1	Frame, Main, Tractor, Single, 7'
	315-064-100	1	Frame, Main, Tractor, Single, 8'
	315-065-100	1	Frame, Main, Tractor, Single, 9'
2	LP	AR	Skid Grip
3	000-190-082	2	Edge, Cutting, End, DBF, 25" Long
4	000-150-265	8	Bolt, Carriage, 5/8"-11UNC x 2" Long
5	000-155-077	AR	Washer, Lock, 5/8"
6	000-158-138	AR	Nut, Hex, 5/8"-11UNC
7	000-190-152	1	Edge, Cutting, DBF, 84" Long
	000-190-153	1	Edge, Cutting, DBF, 96" Long
	000-190-091	1	Edge, Cutting, DBF, 108" Long
8	000-150-263	AR	Bolt, Plow, 5/8"-11UNC x 2" Long
9	000-161-075	2	Pin, Hitch, 1-1/8" Dia. x 7" Long, Category II
10	000-161-019	2	Pin, Hair, Cotter, 3/16" Dia. x 3-3/4" Long
11	000-161-085	1	Pin, Top Link, 1" Dia. x 5-1/4" Long, Category II
12	000-161-028	1	Pin, Lynch, Locking, 7/16"

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



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

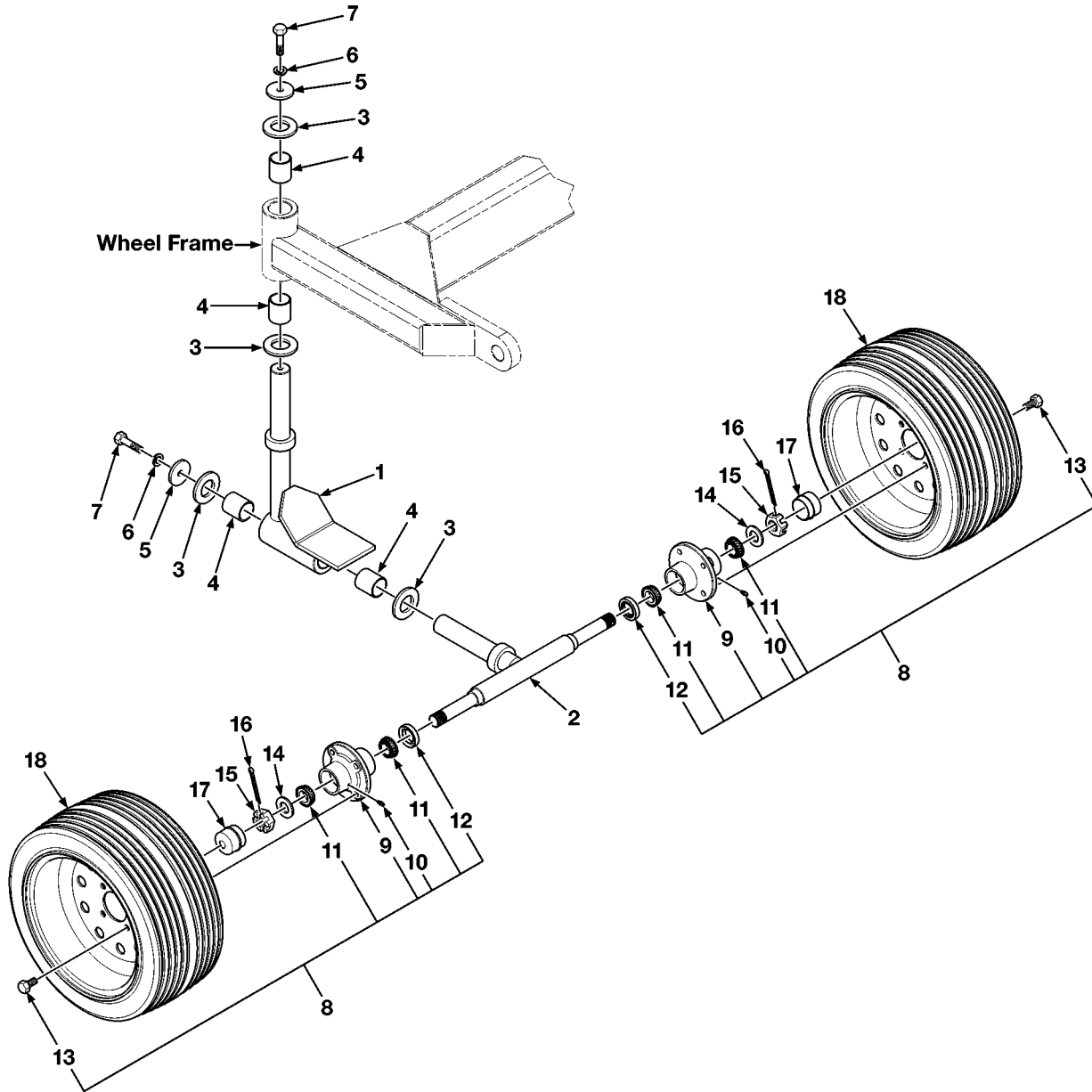
Figure 2. Wheel Frame

Item	Part No.	Qty	Description
1	315-066-200	1	Frame, Wheel, Tractor, Single, 7'
	315-065-200	1	Frame, Wheel, Tractor, Single, 8' & 9'
			Includes Items 2 & 3
2	000-176-174	2	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, Axle, Wheel and Related Parts



Laser Grading Box PARTS LIST



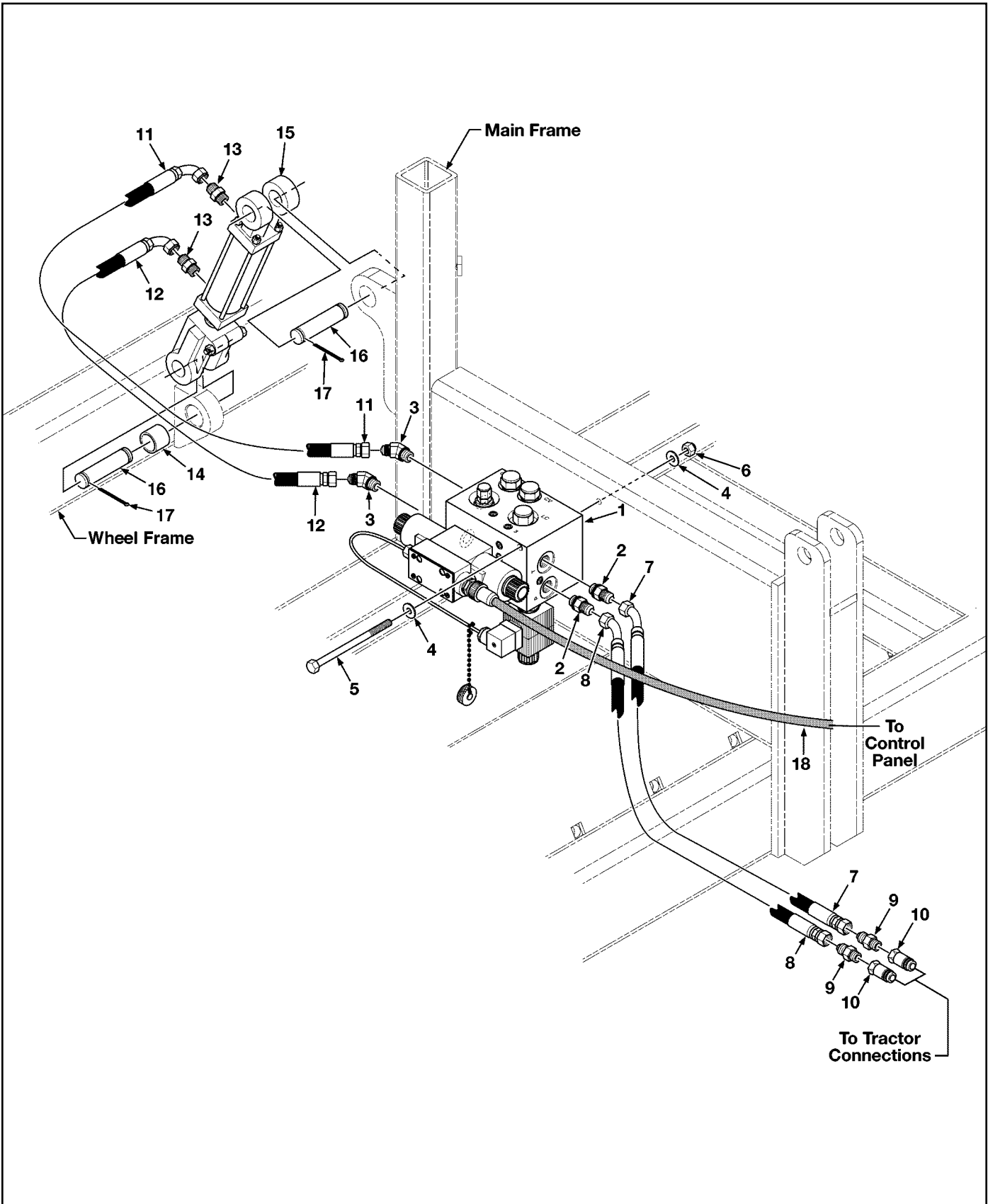
Figure 3. Caster, Axle, Wheel and Related Parts

Item	Part No.	Qty	Description
1	315-065-300	2	Caster Weldment
2	315-065-400	2	Axle Weldment
3	000-155-002	8	Washer, Flat, 2-1/4" OD x 1-1/2" ID x 10 Gauge Thick
4	000-176-171	8	Bushing, Wheel Frame, 1-3/4" OD x 1-1/2" ID x 1-1/2" Long
5	000-155-004	4	Washer, Flat, 2-1/4" OD x 17/32" ID x 1/4" Thick
6	LP	4	Washer, Lock, 1/2"
7	LP	4	Bolt, Hex Head, 1/2"-13UNC x 1-1/4" Long
8	001-001-069	4	Bearing Assembly, Includes Items 9 thru 13
9	001-001-074	1	Hub, Wheel, With Outer Race
10	LP	1	Fitting, Lube, Drive
11	000-176-184	2	Bearing, Roller, Tapered, 1" Dia. Bore
12	000-166-302	1	Seal, Grease, 2" OD x 1-1/4" ID
13	LP	4	Bolt, Hex Head, 1/2"-20UNF x 1" Long
14	000-155-003	4	Washer, Flat, 1-1/2" OD x 1" ID x 14 Gauge
15	000-158-193	4	Nut, Castle, 1"-14UNF
16	LP	4	Pin, Cotter, 1/8" Dia. x 1-1/4" Long
17	001-001-084	4	Cap, Dust
18	001-001-072	4	Wheel/Tire, 18/8.50-12, Low Profile

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



Laser Grading Box PARTS LIST

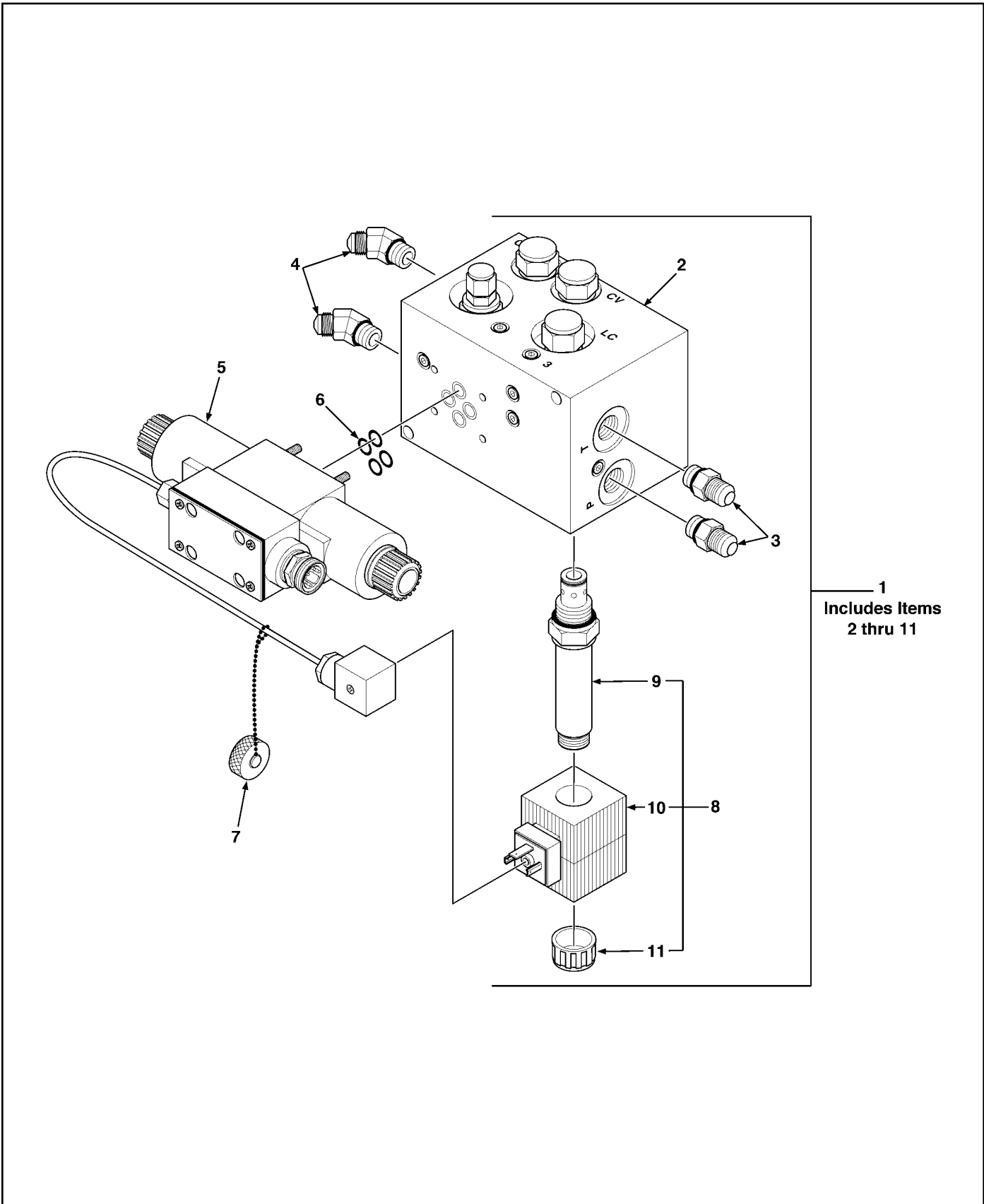


Figure 4. Hydraulics

Item	Part No.	Qty	Description
1	000-166-404	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	000-166-187	1	Hose, 1/2" Dia. x 58" Long x 8FJX x 8FJX45, 3,000 PSI
8	000-166-187	1	Hose, 1/2" Dia. x 58" Long x 8FJX x 8FJX45, 3,000 PSI
9	000-166-168	2	Adapter, Straight, 8MJ x 8MP
10	000-166-210	2	Coupler, Quick Disconnect, Ag, Male, 1/2"
11	000-166-185	1	Hose, 3/8" Dia. x 28" Long x 6FJX x 8FJX90, 3,000 PSI
12	000-166-185	1	Hose, 3/8" Dia. x 28" Long x 6FJX x 8FJX90, 3,000 PSI
13	000-166-170	2	Adapter, Straight, 8MJ x 8MB
14	000-176-174	1	Bushing, Wheel Frame, 1-1/4" OD x 1" ID x 1" Long
15	000-166-181	1	Cylinder, Hydraulic, 3" Bore x 6" Stroke, Includes Items 16 & 17
16	000-161-068	2	Pin, Cylinder, 1" Dia. x 3-3/8" Long
17	LP	4	Pin, Cotter, 3/16" Dia. x 1-3/4" Long
18	000-200-016	1	Cable, Solenoid, 5-Wire, Quick Disconnect, 12' 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

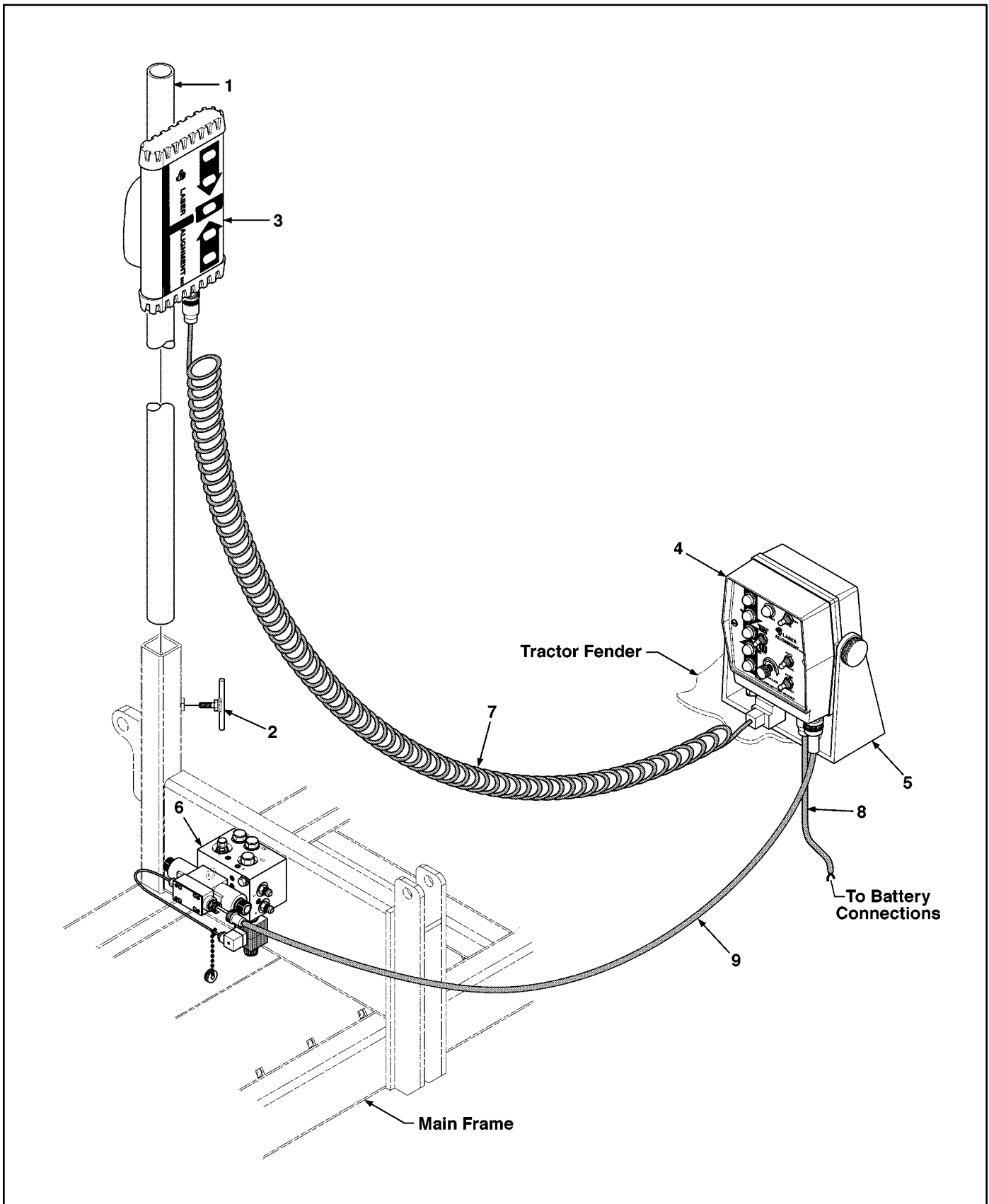
Figure 5. Hydraulic Valve Assembly

Item	Part No.	Qty	Description
1	000-166-404	1	Hydraulic Valve Assembly, Single, Includes Items 2 thru 11
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	000-166-208	1	Valve, Directional, Includes Item 6
6	LP	4	O-Ring, Directional Valve
7	001-001-060	1	Cap, Quick Disconnect, with Chain
8	000-166-196	1	Valve, Solenoid, 2-Speed, Includes Items 9 thru 11
9	NSS	1	Spool
10	NSS	1	Solenoid
11	NSS	1	Nut, Cap

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 Sensor and Control Panel



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

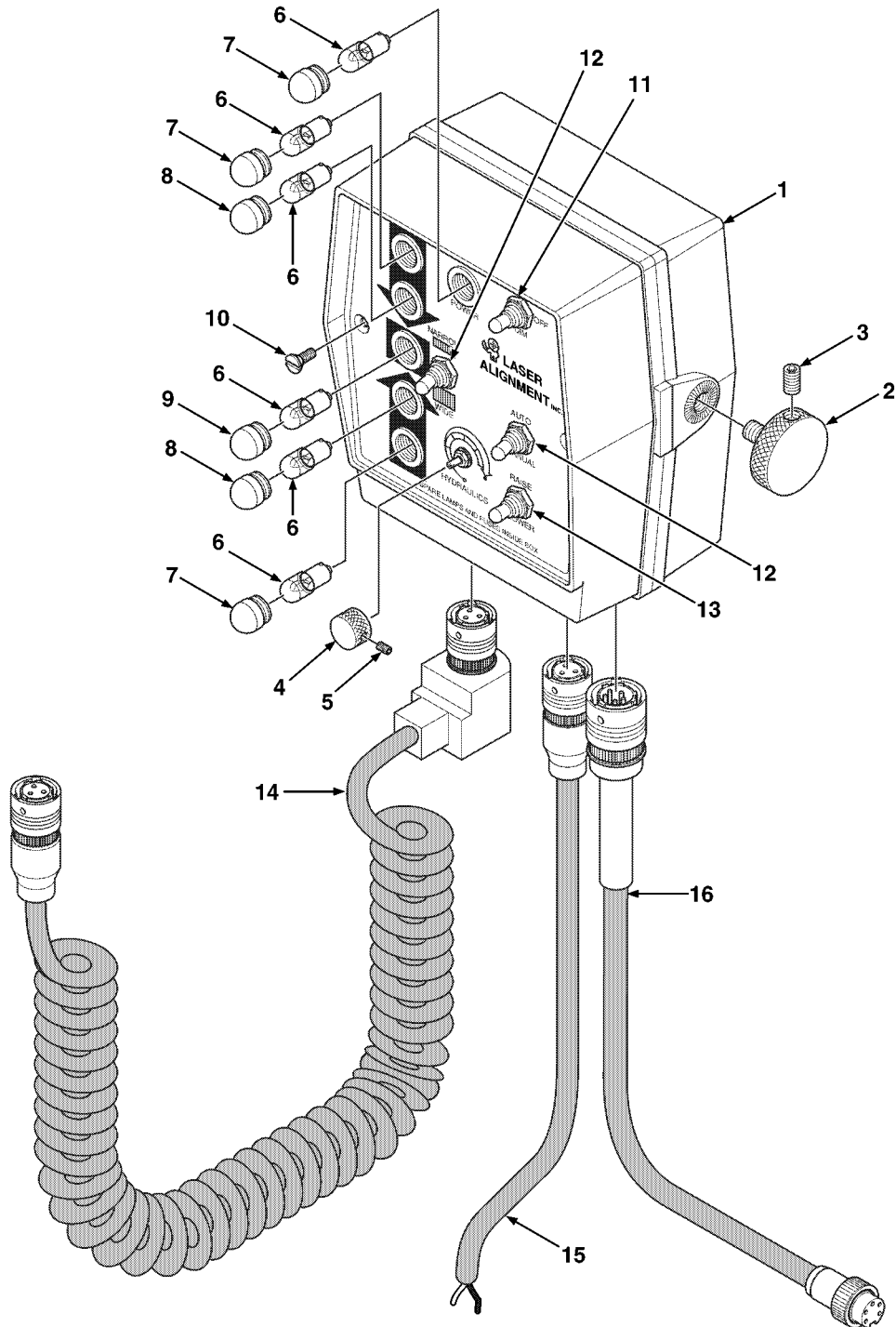
Figure 6. Laser Sensor and Control Panel

Item	Part No.	Qty	Description
1	001-001-052	1	Pole, Mast
2	001-001-053	1	Handle, Tee
3	000-200-012	1	Sensor, Laser, 360°
4	000-200-013	1	Panel, Control, Single, 5 Light, See Breakdown Figure 9
5	001-001-041	1	Bracket, Mounting, Control Panel, Single
6	000-166-404	1	Valve Assembly, Hydraulic
7	000-200-007	1	Cable, Sensor, Coiled, 3-Wire, 15' Long
8	000-200-006	1	Cable, Power, 2-Wire, 20' Long
9	000-200-016	1	Cable, Solenoid, 5-Wire, Quick Disconnect, 12' 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 and Cables



Laser Grading Box PARTS LIST



ATI Corporation
 New Holland, PA 17557
 Phone (717) 354-8721 • FAX (717) 354-2162
 1-800-342-0905
 www.level-best.com

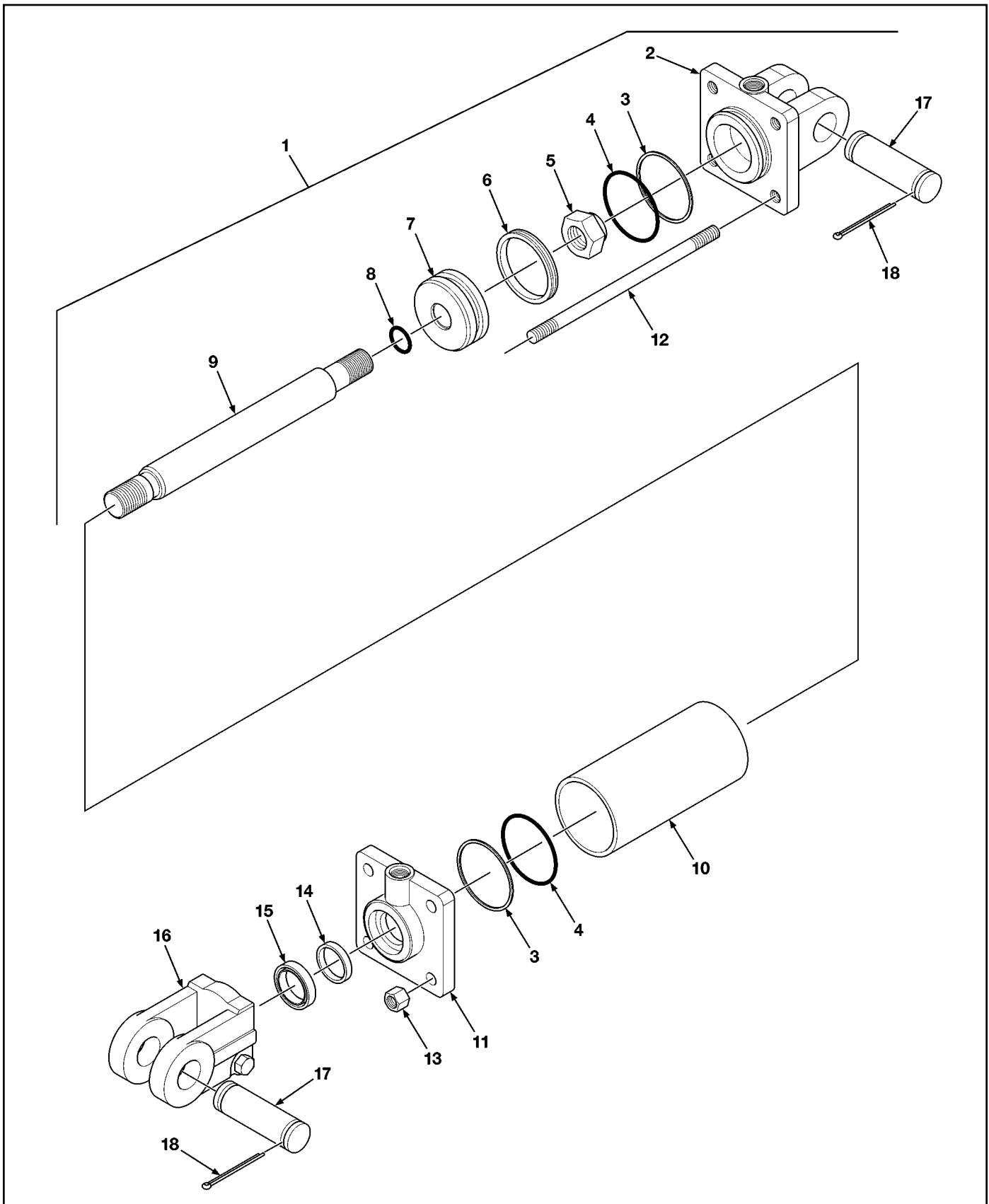
Figure 7. Control Panel and Cables

Item	Part No.	Qty	Description
1	000-200-013	1	Panel, Control, Single, Includes Items 2 thru 13
2	000-200-030	2	Knob, Mounting Bracket, Includes Item 3
3	NSS	2	Screw, Set
4	000-200-034	1	Knob, Hydraulic Control, Includes Item 5
5	NSS	1	Screw, Set, #4-40UNC x 3/16" Long
6	000-200-028	6	Lamp, Control Panel, 14 Volt, #1893
7	000-200-026	3	Lens, Cover, Light, Red
8	000-200-025	2	Lens, Cover, Light, Amber
9	000-200-024	1	Lens, Cover, Light, Green
10	000-150-028	2	Screw, Flat Head, #8-32UNC x 5/16" Long
11	000-200-031	1	Switch, Toggle, On/Off/Dim
12	000-200-032	2	Switch, Toggle, A/B
13	000-200-033	1	Switch, Toggle, Momentary, Center Return
14	000-200-007	1	Cable, Sensor, Coiled, 3-Wire, 15' Long
15	000-200-006	1	Cable, Power, 2-Wire, 20' Long
16	000-200-016	1	Cable, Solenoid, 5-Wire, Quick Disconnect, 12' 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 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

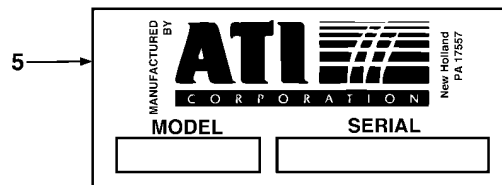
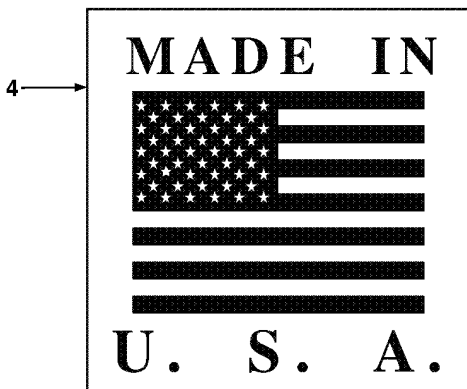
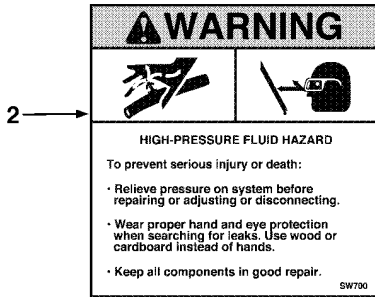
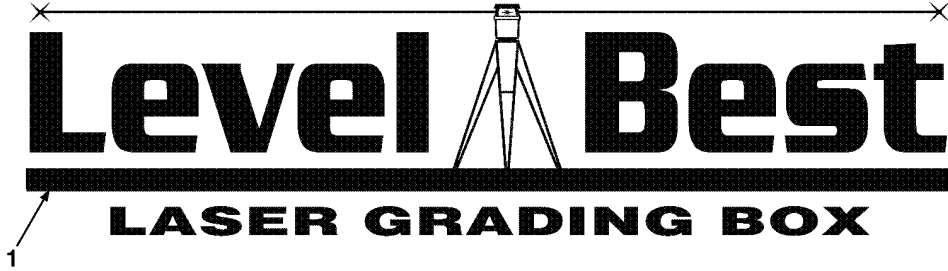
AR - As Required NSS - Not Serviced Separately ASN - After Serial No. BSN - Before Serial No. LP - Local Purchase



Laser Grading Box PARTS LIST

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



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	000-186-047	2	Decal, Danger, This Machine Starts & Stops Automatically
4	000-186-048	2	Decal, Made in U.S.A.
5	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