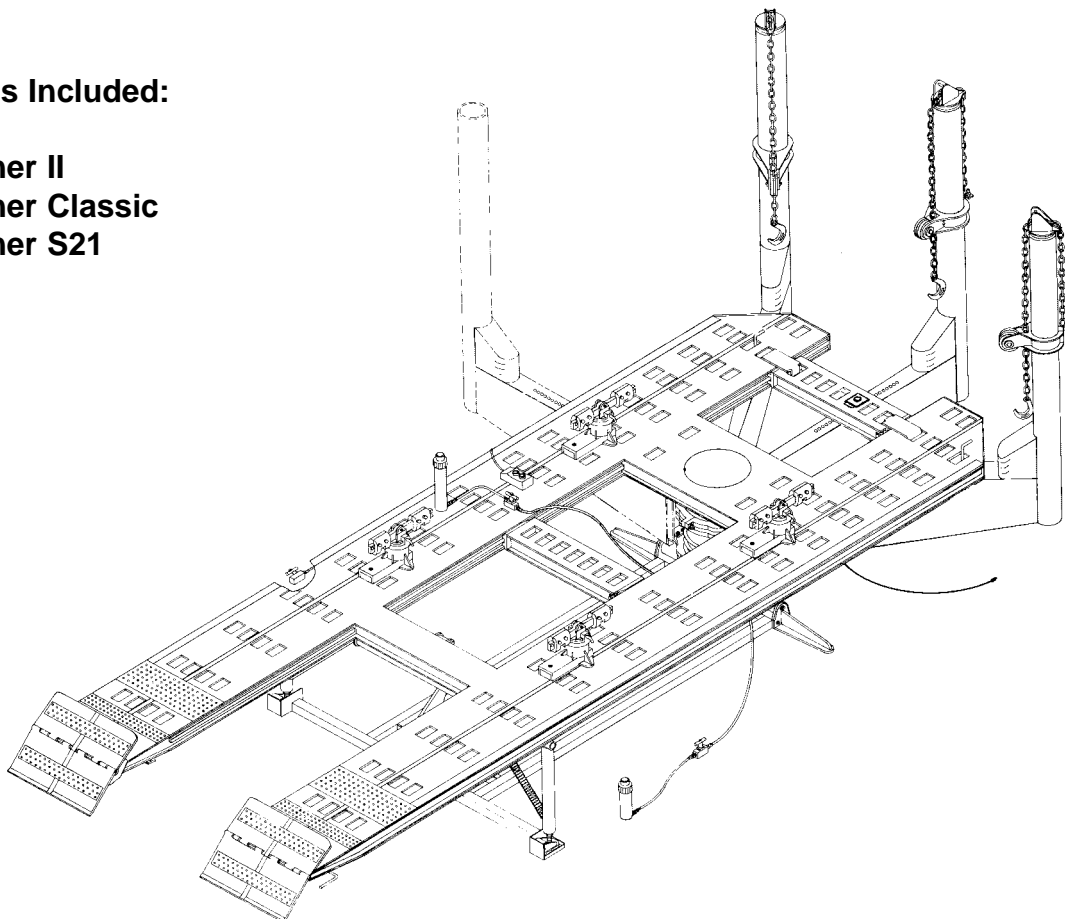


Chief EZ Liner

Models Included:

EZ Liner II
EZ Liner Classic
EZ Liner S21



PARTS MANUAL



CHIEF'S LIMITED ONE-YEAR WARRANTY & LIABILITY

Chief Automotive Systems, Inc. warrants for one year from date of installation and/or purchase any of its products which do not perform satisfactorily due to defect caused by faulty material or workmanship. Chief's obligation under this warranty is limited to the repair or replacement of products which are defective and which have not been misused, carelessly handled, or defaced by repair or repairs made or attempted by others.

CHIEF AUTOMOTIVE SYSTEMS, INC. DOES NOT ASSUME RESPONSIBILITY FOR ANY DEATH, INJURY OR PROPERTY DAMAGE RESULTING FROM THE OPERATOR'S NEGLIGENCE OR MISUSE OF THIS PRODUCT OR ITS ATTACHMENTS. CHIEF MAKES NO WRITTEN, EXPRESS OR IMPLIED WARRANTY WHATSOEVER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE REGARDING THE EQUIPMENT OR ANY PART OF THE PRODUCT OTHER THAN THE LIMITED ONE-YEAR WARRANTY STATED ABOVE.

Returned merchandise requires a "RETURNED GOODS AUTHORIZATION NUMBER" on the package. Authorization numbers can be obtained by calling or writing the Parts Department, Chief Automotive Systems, Inc. No returned merchandise will be accepted without an authorization number. All returned merchandise must be shipped freight prepaid (and may be subject to a 15 percent handling and restocking charge) to:

Chief Automotive Systems, Inc.
Attn: Returned Goods Dept.
1924 E. Fourth St.
P.O. Box 1368
Grand Island, NE 68802-1368

or Your Authorized
Chief Automotive Systems, Inc.
Representative


PARTS INFORMATION

To order replacement parts for a Chief EZ Liner system, contact Chief Automotive Systems, Inc. 800-445-9262. (If outside the United States, contact nearest Chief Automotive Systems, Inc. representative.)

The numbers and drawings in this manual represent those parts that an owner might install. For part numbers not listed, contact Chief Automotive Systems, Inc.

When contacting Chief Automotive Systems, Inc. by telephone or mail, provide the following information: name, name of shop, shop telephone number, and shop address. Additional information needed when ordering: description of part(s) and part number(s). Also indicate the EZ Liner Model for which the part is intended.

NOTE: Chief reserves the right to alter product specifications and/or package components without notice.

 **CAUTION:** Always use Chief authorized parts (or equivalent) with the EZ Liner system. If replacing electrical and hydraulic components, bolts/fasteners and/or chain, make certain the parts meet the following standards (minimum requirements).

Electrical Components

All electrical components must be replaced with Chief authorized parts or their equivalent and be UL approved.

The three-wire power cord and the four-wire remote control switch cord must be 16 gauge minimum (EZII/Classic) or 12 gauge minimum (EZ Liner S21) in lengths equal to factory installed cords.

Hydraulic Hoses

All hydraulic components must be replaced with Chief authorized parts or their equivalent.

The two-wire braid 1/4 inch (6.3mm) inner diameter hydraulic hoses must have a minimum burst pressure of 20,000 psi (1400 bar) and a minimum working pressure of 5,000 psi (350 bar) (as per SAE Standard 100

R2A). They must be in lengths equal to factory installed hoses.

Bolts/Fasteners

All bolts and fasteners must be replaced with Chief authorized parts or their equivalent and must not be less than Grade 5 (Class 8.8).

Any bolt used in a **pulling clamp** that is frequently tightened must be a Grade 8 (Class 10.9).

All bolt lengths and diameters must be equal to those installed at the factory.

Chain

All **EZ Liner II/Classic tower and accessory chains** must be replaced with Chief authorized chain or an equivalent.

Both tower and accessory chain must be NACM Grade 80 3/8 inch (10mm) alloy chain, proof tested to 20,000 pounds (90kN) and have a workload of 10,000 pounds (45kN). It must be in a length and size equal to factory installed chain.

All **S21 tower and accessory chains** must be replaced with Chief authorized chain or an equivalent.

The tower chain must be NACM Grade 80 1/2 inch (13mm) alloy chain, proof tested to 28,000 pounds (125kN) and have a workload of 14,000 pounds (63kN). It must be in a length and size equal to factory installed chain.

The accessory chain must be NACM Grade 80 3/8 inch (10mm) alloy chain, proof tested to 20,000 pounds (90kN) and have a workload of 10,000 pounds (45kN). It must be in a length and size equal to factory installed chain.

Labels

CAUTION, WARNING and OTHER Labels — Replacement labels are available and some labels are also available in some foreign languages. To order, contact Chief Automotive Systems, Inc. 800-445-9262.

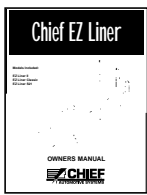
CHIEF EZ LINER II/CLASSIC

PART NO.	DESCRIPTION
680034	Lid, Small, Old, PRE II-89
681459	Pump Lid, Classic, EZII
693433	Anti-Skid Tape 6" x 22"
693425	Anti-Skid Tape 9" x 22"
681336	Movable Crossmember Lock
690110	Tower Assembly
690195	Safety Ramp Assembly, Right
690540	Safety Ramp Assembly, Left
690312	Porta Frame Assembly
690320	Lift Assembly
690793	Tower Collar Assembly (Cast) (Includes Locking Knob)
690398	Pedestal Complete Assembly
690638	Rear Valve Cover Assembly
620875	Anti-Skid Tape 14"11" x 2"

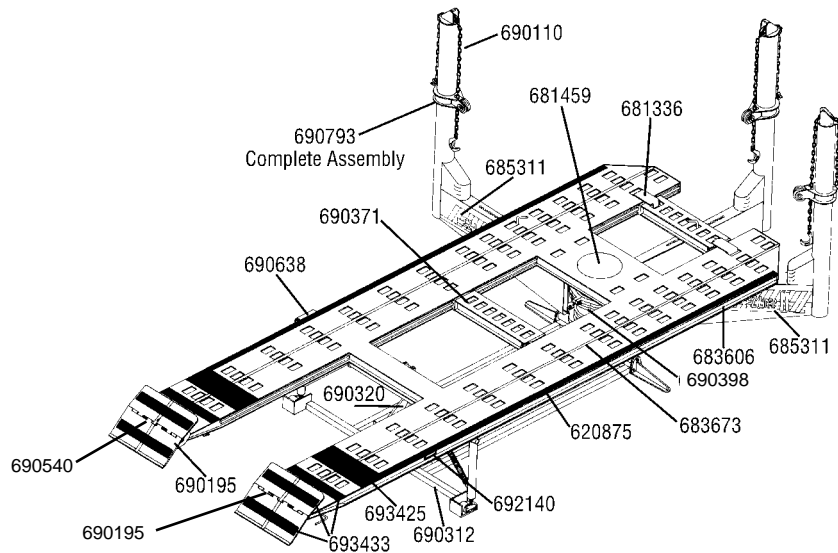
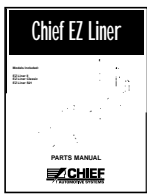
PART NO.	DESCRIPTION
681328	Movable Crossmember Flipper
681336	Movable Crossmember Lock (EZII)
606539	Movable Crossmember Lock (S21/Classic)
690646	Movable Crossmember Assembly
629440	Nut, 3/8, 16"
629861	Bolt, 3/8, 16 x 1 1/4"
692094	CAUTION Crossmember Decal
685311	EZ Liner II Decal
683615	EZ Liner Classic Decal
683606	EZ Liner Flag Decal
683673	Tape, 39 Foot Roll, Red
692140	EZ Liner Phone No. Decal
683658	Owners Manual (EZ Liner)
683659	Parts Manual (EZ Liner)

Chief EZ Liner II

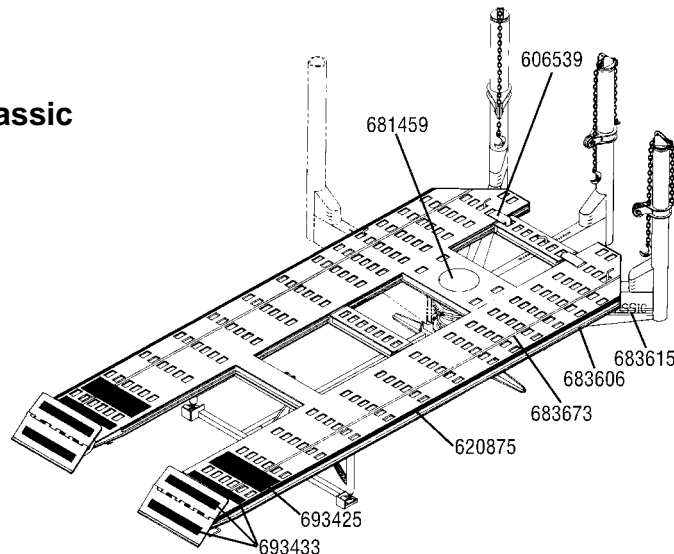
Owners Manual (EZ Liner)



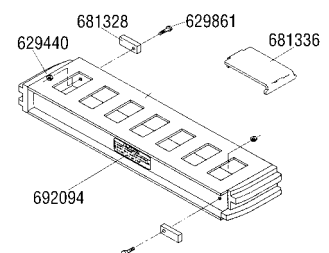
Parts Manual (EZ Liner)



Chief EZ Liner Classic



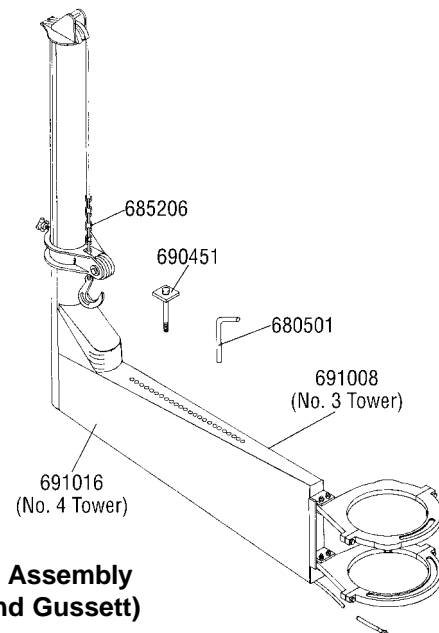
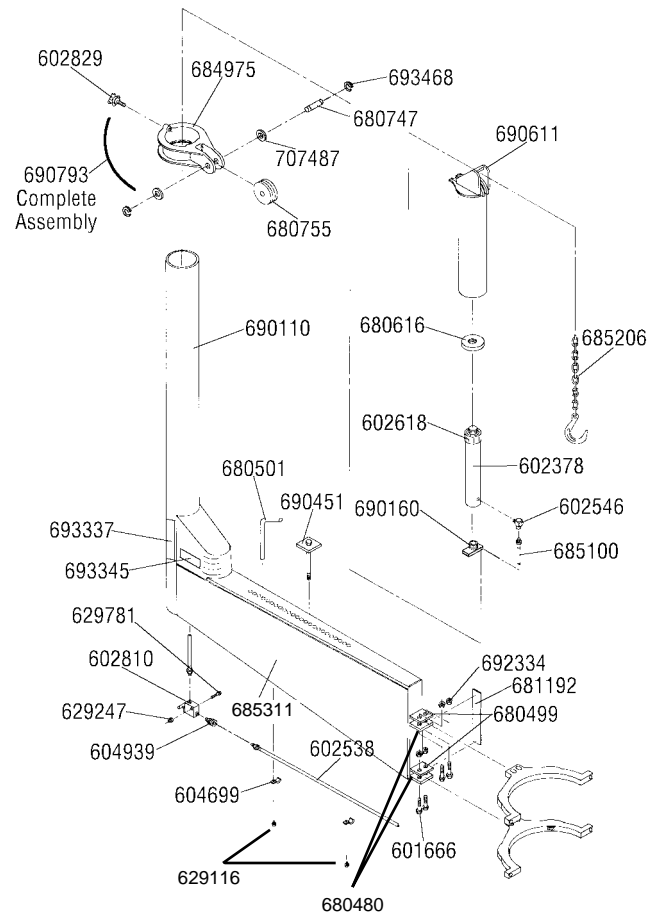
Crossmember Assembly 690646



CHIEF EZ LINER II/CLASSIC TOWER ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
	Tower Assembly
602378	Ram, 10" Stroke
602407	Quick Coupler Male
602538	Hose, 72"
602546	Elbow, 90°
602810	Tower Valve
604699	Hose Clamp
604939	Female Quick Coupler
680480	Tower Ear, 1/2"
680499	Tower Ear, 3/8"
680501	Tower Pin
680616	Threaded Flange
602618	Threaded Adapter, YS107, OTC 20471
681192	Tower Ring Gusset
685100	HYD Hose, 49"
685206	Chain, 3/8", 12' W/Hook
690110	Tower Weldment Only
690160	Ram Base Assembly
690793	Tower Collar Assembly (Cast) (Includes Locking Knob)
602829	Locking Knob
684975	Cast Collar
707487	Flat Washer, 1 1/4"
693468	Retaining Ring, Heavy Duty, External
680747	Pin, Grooved
680755	Roller, 4" x 3/8"
690451	Tower Tie Bolt Assembly
685311	Decal, Tower, EZII (1993)
683615	Decal, Tower, Classic (1993)
693345	WARNING Decal (White)
693337	CAUTION Decal (Yellow)
690611	Tower Head Assembly
629781	Bolt, 1/4-20 x 2"
629247	Nut, 1/4-20
629116	Self Tapping Screw, 1/4-20 x 3/4"
601666	Bolt (Hex), 5/8"-11 x 2 1/4"
692334	Nut, Hex Jam 5/8"-11NC
604664	O.T.C. Cylinder Repair Kit, I.D. Blue or Silver
691016	No. 4 Outside Left Tower Assembly, (Complete), EZII
691008	No. 3 Outside Right Tower Assembly, (Complete), EZII
686196	No. 4 Outside Left Tower Assembly, (Complete), Classic (Not Shown)
691681	No. 3 Outside Right Tower Assembly, (Complete), Classic (Not Shown)

691075 — Tower Assembly



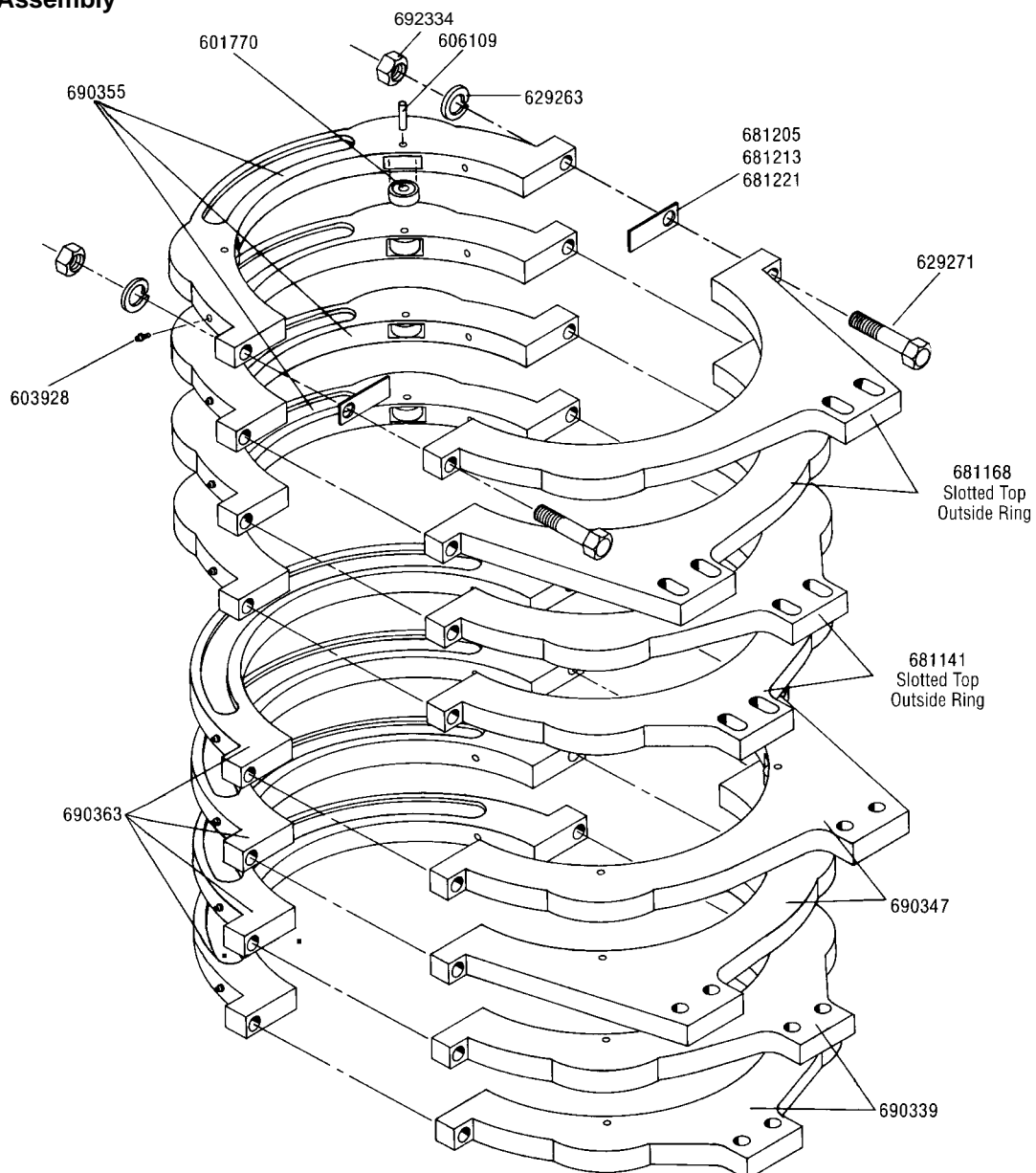
690566 — Tower Assembly (Round Gusset)

CHIEF EZ LINER II/CLASSIC TOWER RING ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
	Tower Ring Assembly
692334	Nut, Hex Jam, 5/8-11, Gr. 5, Bl.
629271	Bolt, 5/8-11 x 3 1/2"
629263	Split Lock Washer, 5/8"
601770	Ring Bearing
603928	Press Fit Grease Zerk, 1/4"
606109	Dowel Pin, 5/16 x 1"
681205	Tower Ring Shim, 16GA

PART NO.	DESCRIPTION
681213	Tower Ring Shim, 1/8"
681221	Tower Ring Shim 20GA
690339	Ring Assembly, Bottom, Front, Inner
690347	Ring Assembly, Bottom, Front, Outer
690355	Ring Assembly, Top, Rear
690363	Ring, Bottom, Rear
681168	Ring, Top, Front, Outer
681141	Ring, Top, Front, Inner

Tower Ring Assembly

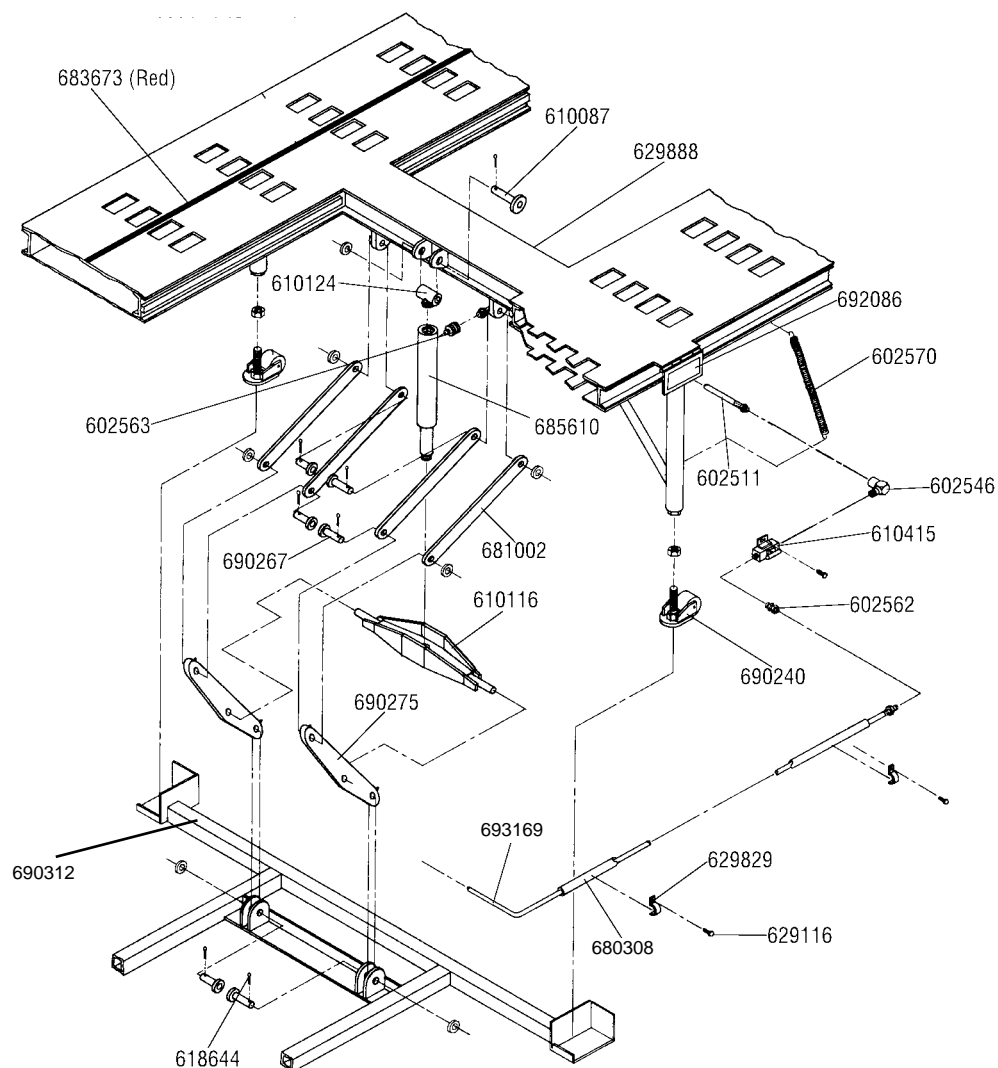


CHIEF EZ LINER II/CLASSIC LIFT ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
	Lift Assembly
685610	Ram, 10" Stroke (8 1/2 T)
602511	Hose, 43"
602546	Elbow, 90°
602562	Swivel Coupler
602563	Coupler, Swivel W/Orifice
602570	Spring
690267	Lift Leg Pin Assembly
610087	Jack "T" Pin Assembly
610116	Bolster Bar Assembly
610124	Jack "T" Assembly
610415	Lift Valve
680308	Hose Housing, Red

PART NO.	DESCRIPTION
681002	Lift Arm, 3/8"
693169	Hose, 146"
690240	Adjust Screw Assembly
690275	Lift Arm Assembly
690312	Porta Frame Assembly
629829	Hose Housing Clamp, 1"
629116	Self Tapping Screw, 1/4-20 x 3/4
618644	Cotter Pin, 1/4" x 2"
629888	Cable Tie (For 43" Hose)
692086	Decal, Caution, Lift Valve
683673	Red Tape, Roll (New EZII/Classic), 39'
692289	Washer, 2" O.D. x 1 1/16" x 1/4 Black

Lift Assembly

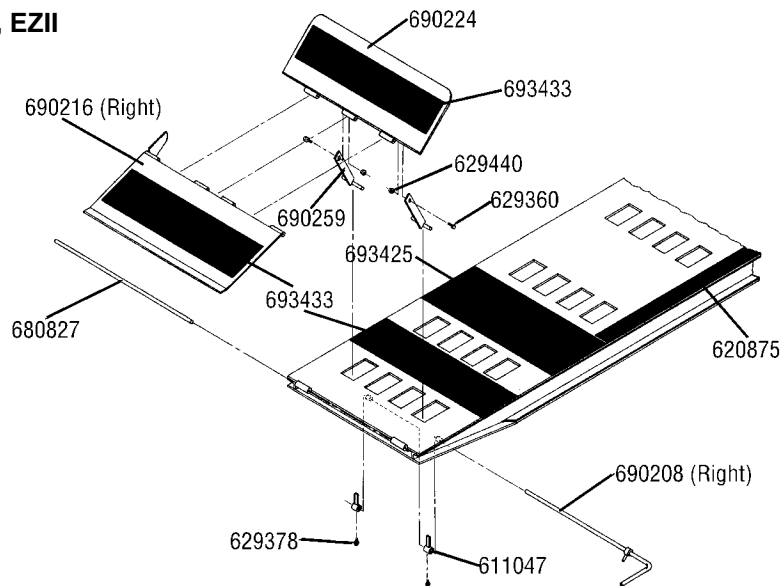


CHIEF EZ LINER II/CLASSIC SAFETY RAMP ASSEMBLY COMPONENTS

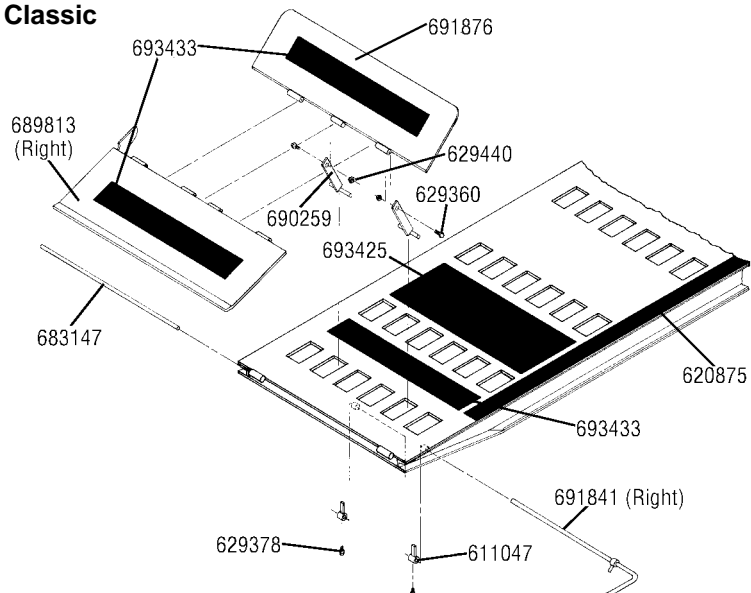
PART NO.	DESCRIPTION
611047	Ramp Trigger Assembly
680827	Ramp Hinge Pin, EZII
683147	Ramp Hinge Pin, Classic
690208	Ramp Release Handle Assembly, RH, EZII
691841	Ramp Release Handle Assembly, RH, Classic
690689	Ramp Release Handle Assembly, LH, EZII (Not Shown)
691850	Ramp Release Handle Assembly, LH, Classic (Not Shown)
690216	Lower Ramp Assembly, RH, EZII
689813	Lower Ramp Assembly, RH, Classic

PART NO.	DESCRIPTION
690670	Lower Ramp Assembly, LH, EZII (Not Shown)
689821	Lower Ramp Assembly, LH, Classic (Not Shown)
690224	Upper Ramp Assembly, EZII
691876	Upper Ramp Assembly, Classic
690259	Ramp Latch Assembly
629440	Nut, 3/8-16
629360	Bolt, 3/8-16 x 1"
629378	Set Screw, 1/4-20 x 1/2"
693433	Anti-Skid Tape 6" x 22" (EZII/Classic)
620875	Anit-Skid Tape 14'11" x 2" (EZII/Classic)
693425	Anit-Skid Tape 9" x 22" (EZII/Classic)

690195 — Safety Ramp Assembly, EZII (Complete)



689805 — Safety Ramp Assembly, Classic (Complete)

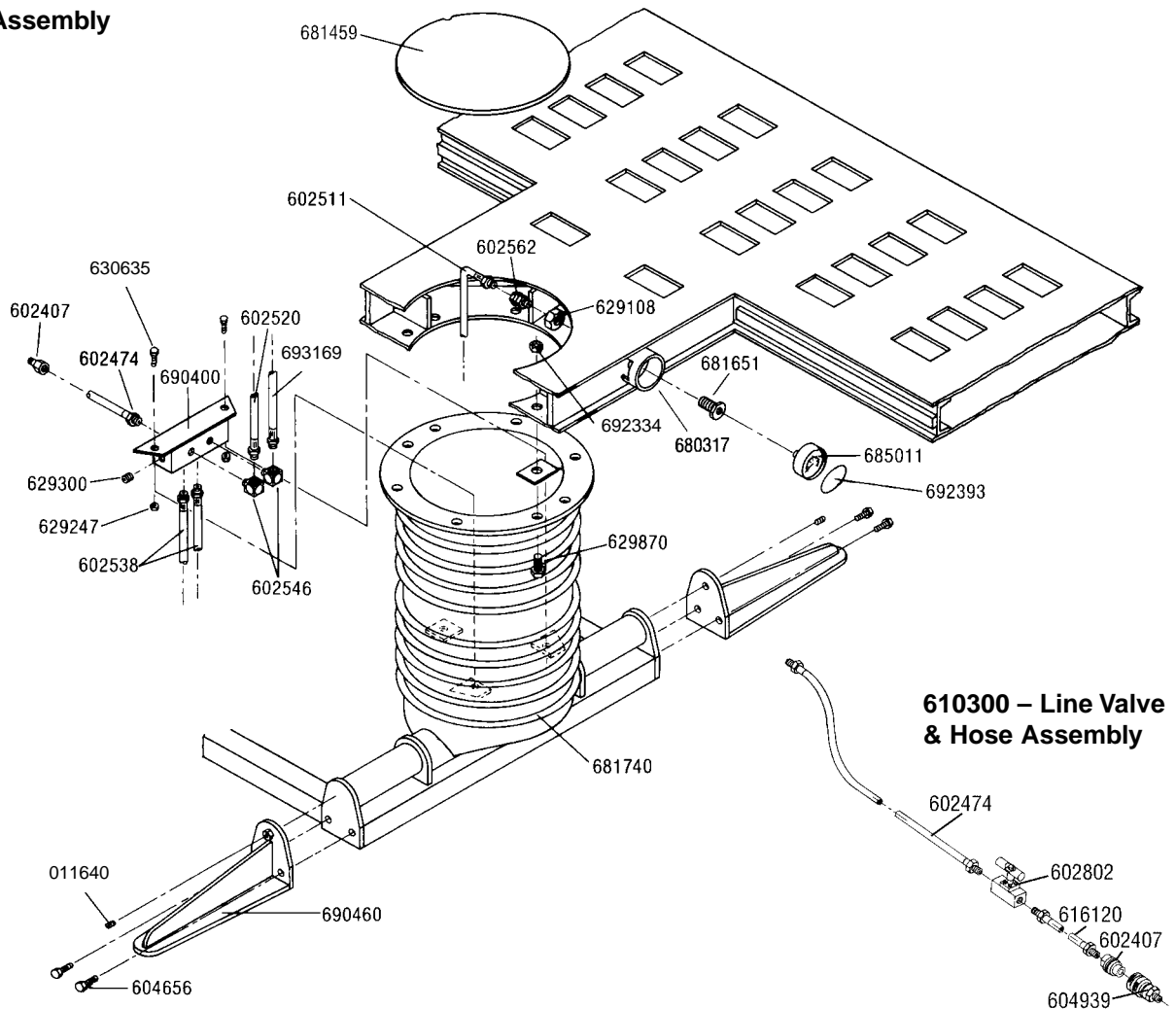


CHIEF EZ LINER II/CLASSIC PEDESTAL ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
	Pedestal Assembly
602511	Hose, 43"
602520	Hose, 59"
602538	Hose, 72"
693169	Hose, 146"
602546	Elbow, Female, 90°
602562	Swivel Coupler
604656	Bolt, 1/2-13 x 1 1/4" Lg.
610300	Auxiliary Line Assembly
616120	24" Hose
602474	164" Hose
602802	Line Valve
602407	Quick Coupler, Male
604939	Quick Coupler, Female
681459	Pump Lid, Classic, EZII

PART NO.	DESCRIPTION
690531	Gauge Assembly Pressure
681651	Gauge Adaptor
685011	Pressure Gauge
681740	Pedestal (Cast, Machined)
690400	Hose Block Assembly
690460	Extension Assembly
630635	Bolt, 1/4-20 x 1"
629300	Pipe Plug, 3/8"
629247	Nut, 1/4-20
629108	Nut (Hex), 1"-8
692334	Nut (Hex), 5/8-11
629870	Bolt, 5/8-11 x 1 1/2"
011640	Set Screw, 1/2-13 x 1/4" Lg.
692393	Clear LOK Gauge Lens, 2 1/2"
680317	Cover, Gauge Protector

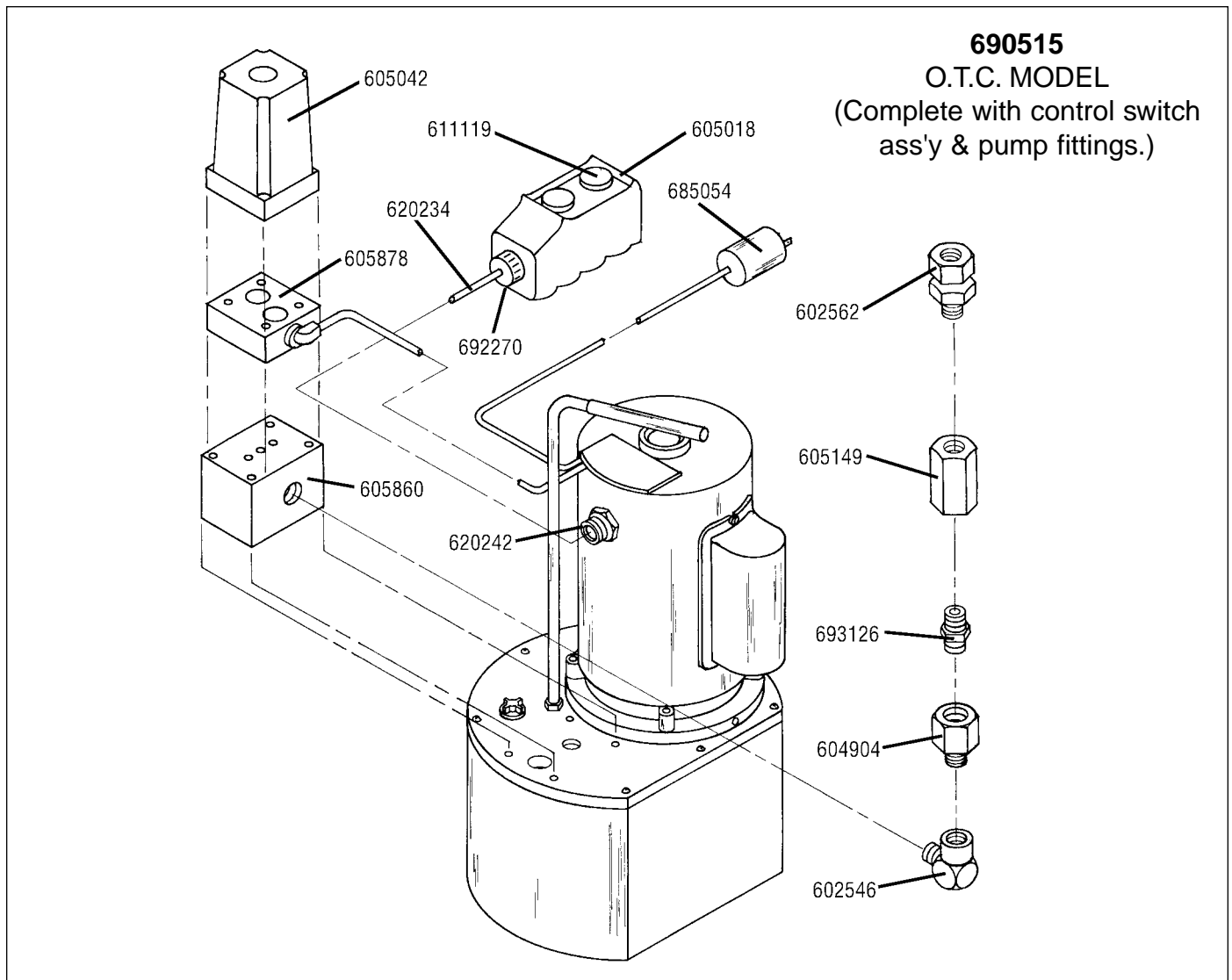
Pedestal Assembly 690777



CHIEF EZ LINER II/CLASSIC O.T.C. MODEL PUMP ASSEMBLY COMPONENTS

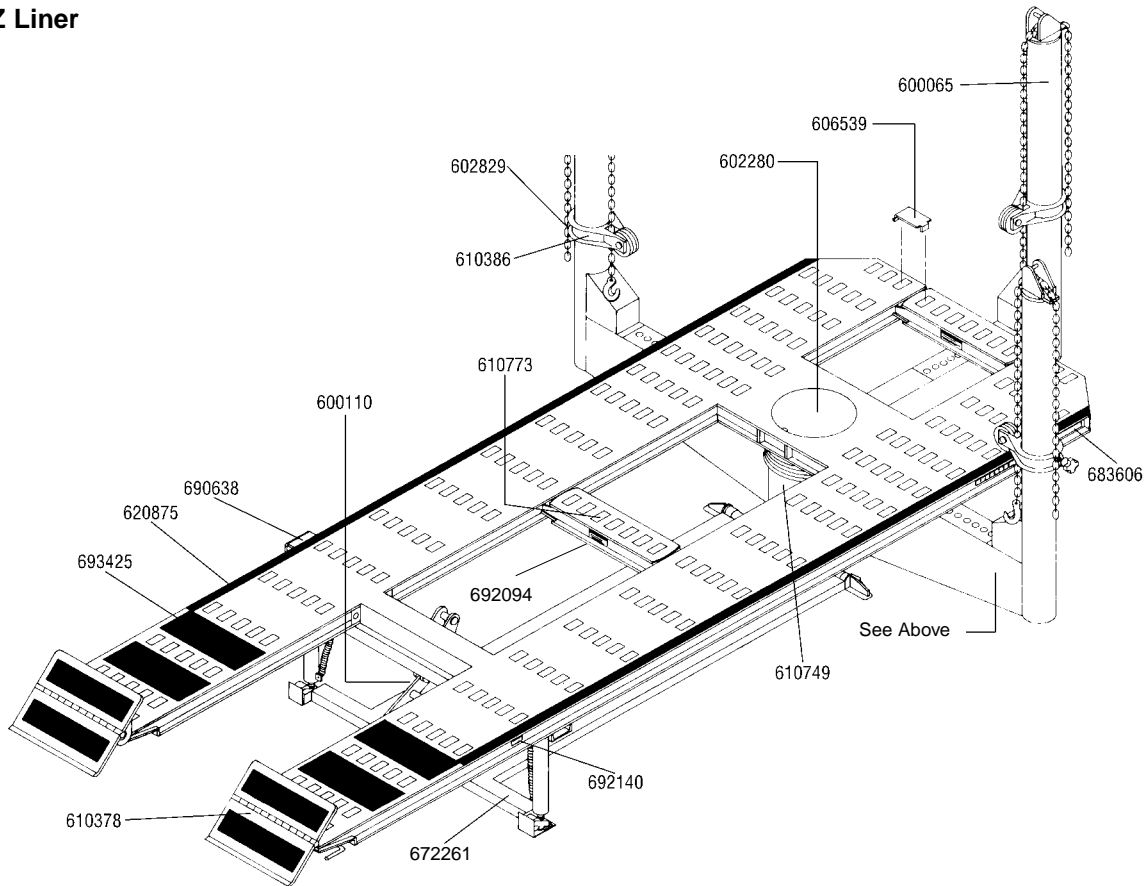
PART NO.	DESCRIPTION
690515	O.T.C. Model, W/Control Switch Assembly
602562	Swivel Coupler
693126	Nipple, 12-8 Adapter
604904	Valve Surge
605042	Solenoid
620234	Joy Cord Male, 21'
605018	Square D Switch
605149	Reducer, 3/4 x 3/8
602546	Elbow, 90°
605860	Valve Block O.T.C.
605878	Solenoid Linkage Base
685054	Power Cord, 20'

PART NO.	DESCRIPTION
611119	Switch & Cord Assembly
629327	O.T.C. Valve Body W/Linkage Base
605835	O.T.C. Valve, Complete
692270	Straing Relief Connector
620242	Female Pigtail for M-L Cord (Not Shown)
685409	Valve Body Repair Kit (Not Shown)
685417	Checkvalve Repair Kit (Not Shown)
685070	Pump Piston Repair Kit (Not Shown)
685169	Red Hose Assembly (Not Shown)
685089	Screw Low Pressure Adjustment (Not Shown)
685097	Spring Low Pressure Unload (Service Only)



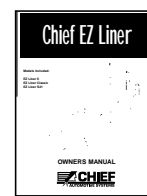
S21 EZ LINER

S21 EZ Liner

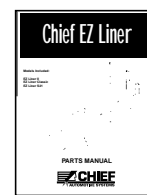


PART NO.	DESCRIPTION
	S21 EZ Liner
600065	Tower Assembly, Left
600065	Tower Assembly, Center
600065	Tower Assembly, Right
606539	Portable Crossmember Lock (new)
610773	Portable Crossmember (new)
602280	Pump Lid
600110	Lift Assembly
610749	Pedestal Assembly
610378	Safety Ramp (Set of 2)
672261	Port-Frame
692140	EZ Liner Phone No. Decal
620875	Anti-Skid Tape
692094	CAUTION Crossmember Decal
690638	Lift Valve Cover
683606	EZ Liner Flag Decal, 14 Country
610386	Tower Collar Assembly (Cast) (Includes Locking Knob)
602829	Locking Knob
683658	Owners Manual (EZ Liner)
683659	Parts Manual (EZ Liner)

Owners Manual (EZ Liner)



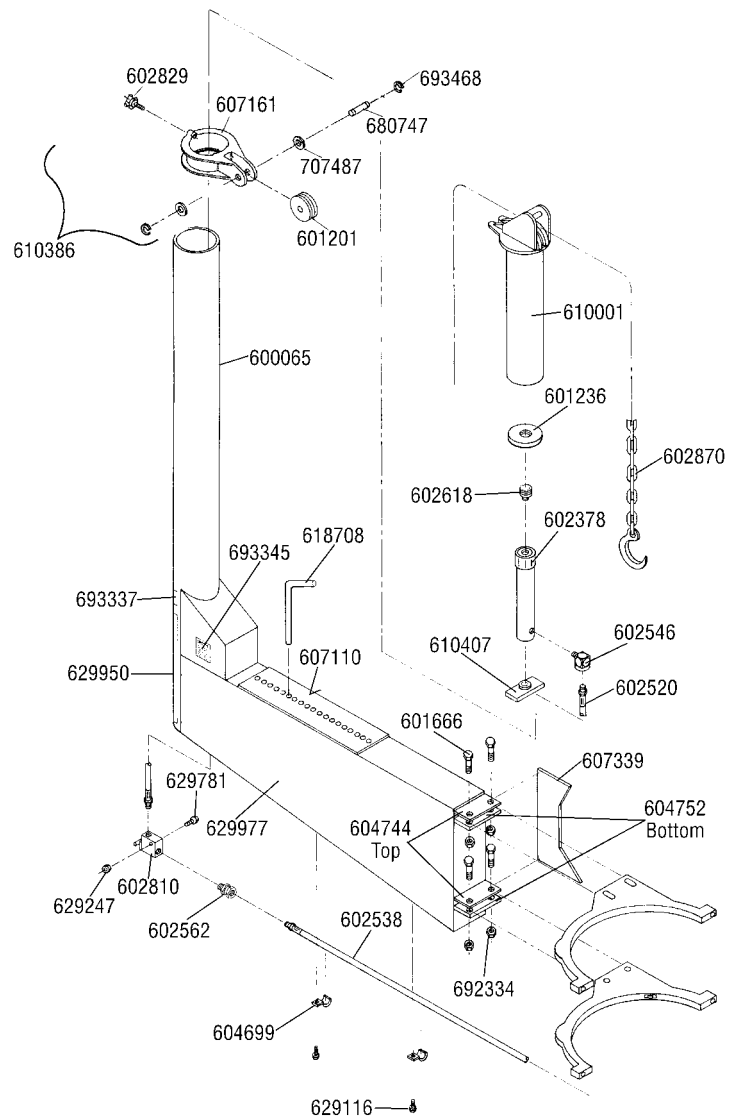
Parts Manual (EZ Liner)



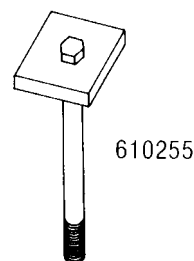
S21 EZ LINER TOWER ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
	Tower Assembly
607110	Pinning Plate (S21)
618708	Tower Lock Pin (S21)
610001	Tower Head Assembly
601236	Threaded Flange
602618	Threaded Adapter, YS107, OTC 20471
602870	Tower Chain W/Hook
602378	10 Ton Hydraulic Cylinder, 10" Stroke
602546	Elbow, 90°
602520	Hose, 59"
610407	Ram Base
602810	Tower Valve, 3/8"
629781	Bolt, 1/4"-20 NC x 2"
629247	Nut, 1/4"-20 NC
600065	Tower Weldment Only
602562	Swivel Coupler
602538	Hose (Tower To Pedestal), 72"
604699	Hose Clamp
601666	Bolt, 5/8"-11 NC x 2 1/4"
692334	Nut Hex Jam, 5/8"-11 NC
607339	Tower Leg Gusset
604744	Tower Ear (TOP), 5/16"
604752	Tower Ear (BOTTOM), 1/2"
610255	Tie Down Bolt Assembly
604664	O.T.C. Cylinder Repair Kit, I.D. Blue or Silver
604381	O.T.C. Cylinder Repair Kit, I.D. White
601560	Templeton, Kenley Cylinder Repair Kit, I.D. Green
629992	Enerpac Cylinder Repair Kit, I.D. Silver
629116	Self Tapping Screw, 1/4-20 x 3/4"
610386	Tower Collar Assembly (Cast) (Includes Locking Knob)
602829	Locking Knob
607161	S21 Collar, Drilled & Tapped
693468	Retaining Ring, Heavy Duty, External
680747	Pin, Grooved
707487	Flat Washer, 1 1/4"
601201	Roller, 5" x 1/2"
629950	Chief Legend Decal (Vertical)
693345	WARNING Decal (White)
693337	CAUTION Decal (Yellow)
629977	Tower Decal (Not Shown)

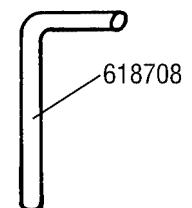
Tower Assembly



Tie Bolt



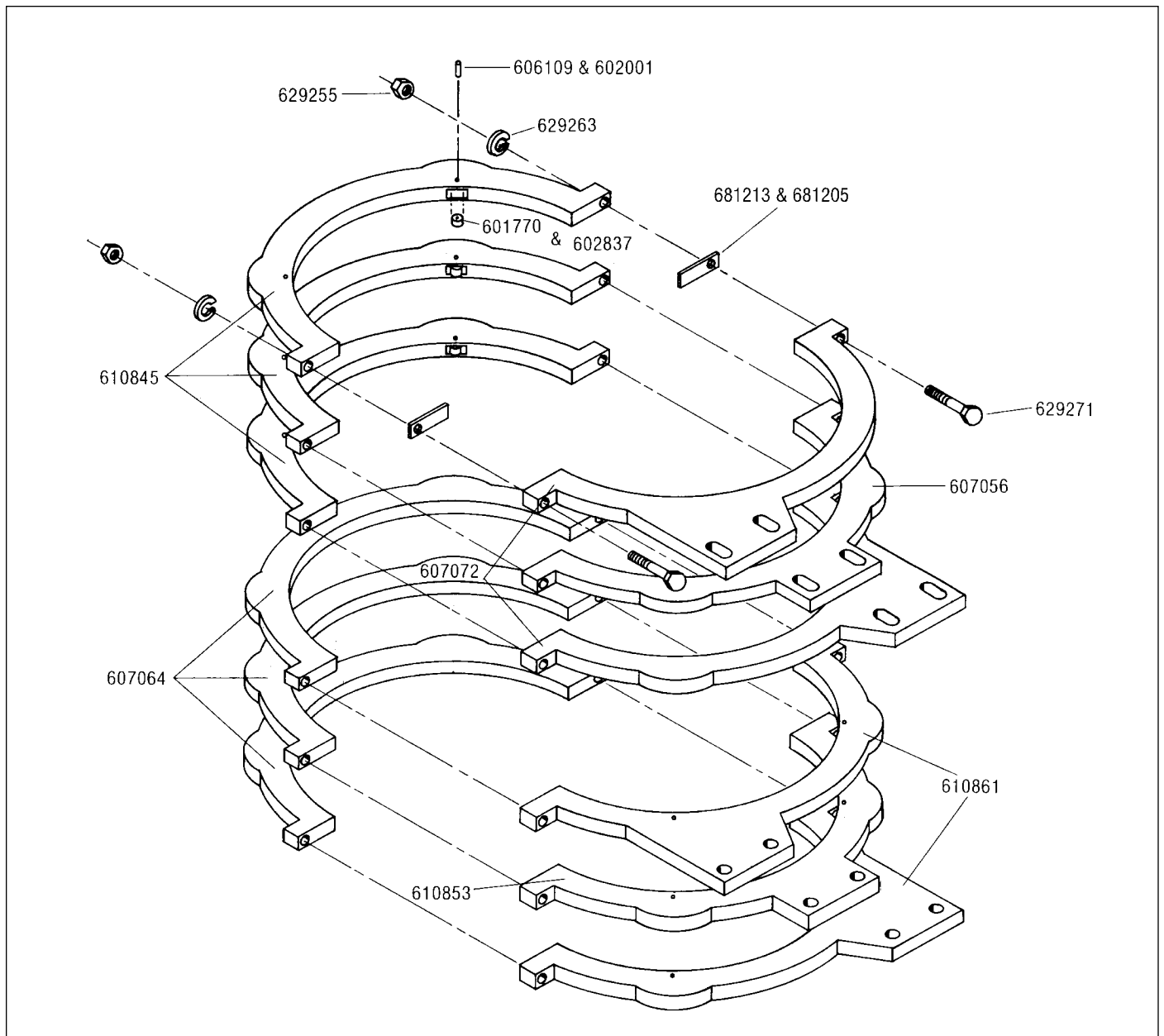
Lock Pin



S21 EZ LINER TOWER RING ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
	Tower Ring Assembly
610845	Ring Half Assembly, Top, Rear
607072	Ring Half, Top, Front, Left/Right
607056	Ring Half, Top, Front, Center
607064	Ring Half, Bottom, Rear
610853	Ring Half Assembly, Bottom, Front, Center
610861	Ring Half Assembly, Bottom, Front, Left/Right
629255	Nut, 5/8" 11 NC

PART NO.	DESCRIPTION
629263	Lock Washer, 11/16" OD x 5/8" ID x 5/64 THK
629271	Bolt, 5/8", 11 NC x 3 1/2"
681205	Tower Ring Shim
681213	Tower Ring Shim
681221	Tower Ring Shim
602001	Dowel Pin Ring Bearing (Before 708)
606109	Dowel Pin Ring Bearing (After 708)
602837	Ring Bearing (Before 708)
601770	Ring Bearing (After 708)

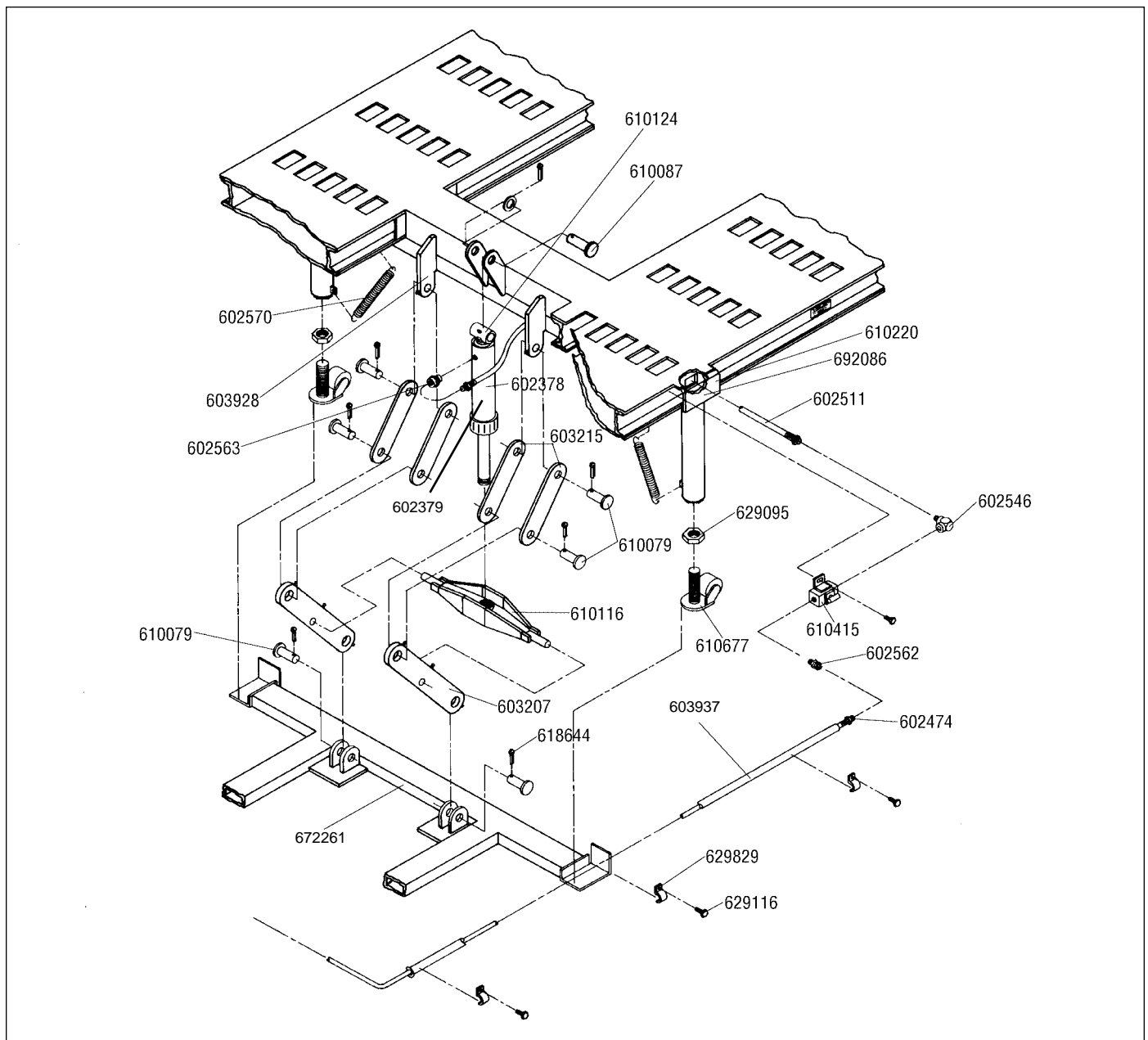


S21 EZ LINER LIFT ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
	Lift Assembly
610087	Jack T Pin
618644	Cotter Pin, 1/4" x 2"
610124	Jack T
602546	Elbow, 90°
602562	Swivel Coupler
602563	Coupler, Swivel W/Orifice
603928	Zerk Fitting, 1/4" Press Fit
602570	Spring, Stiff Leg

PART NO.	DESCRIPTION
602379	Lift Cylinder (10" Stroke)
603215	Top Lift Leg
610079	Lift Leg Pin
610116	Bolster Bar
603207	Bottom Lift Leg
672261	Porta Frame, 1992
602511	Hose (Valve To Cylinder), 43"
610415	Lift Valve W/Bracket

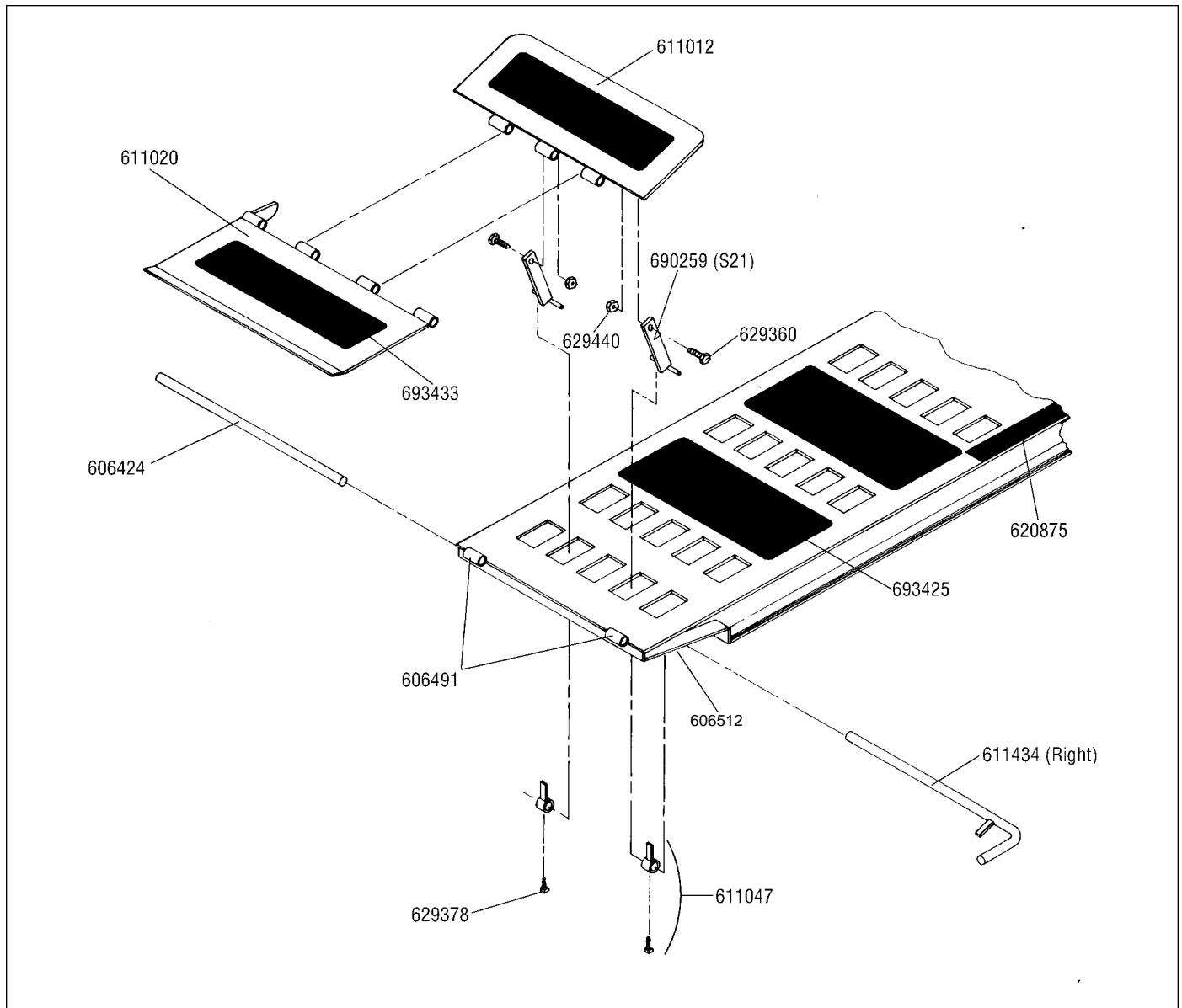
PART NO.	DESCRIPTION
602474	Hydraulic Hose, 164"
603937	Hose Housing, 99", Red
629829	Hose Housing Clamp
610677	Stiff Leg Adjustment Screw
629095	Jam Nut, 1 1/2"
610220	Lift Valve Cover
629116	Self Tapping Screw, 1/4-20 x 3/4"
692086	CAUTION Valve Cover Decal



S21 EZ LINER SAFETY RAMP ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
610378	Safety Ramp Assembly
611012	Upper Ramp
611020	Lower Ramp, RH
611944	Lower Ramp, LH (Not Shown)
611434	Ramp Lever, RH
611039	Ramp Lever, LH (Not Shown)
611047	Ramp Trigger, Includes Screw (Head Set) 1/4" x 20 Sq. x 1/2" Lg.
690259	Ramp Latch (Left or Right), S21 EZ Liner

PART NO.	DESCRIPTION
629360	Bolt, 3/8" 16 NC x 1"
629440	Nut, 3/8" 16 NC
629378	Screw (Head Set) 1/4" x 20 Sq. x 1/2" Lg.
606424	Hinge Pin
606491	Hinge Knuckle
606512	Spacer, Ramp Lever
693433	Anti-Skid Tape, 6" x 22", Ramp
693425	Anti-Skid Tape, 9" x 22", Ramp
620875	Anti-Skid Tape, 14' 11" x 2"



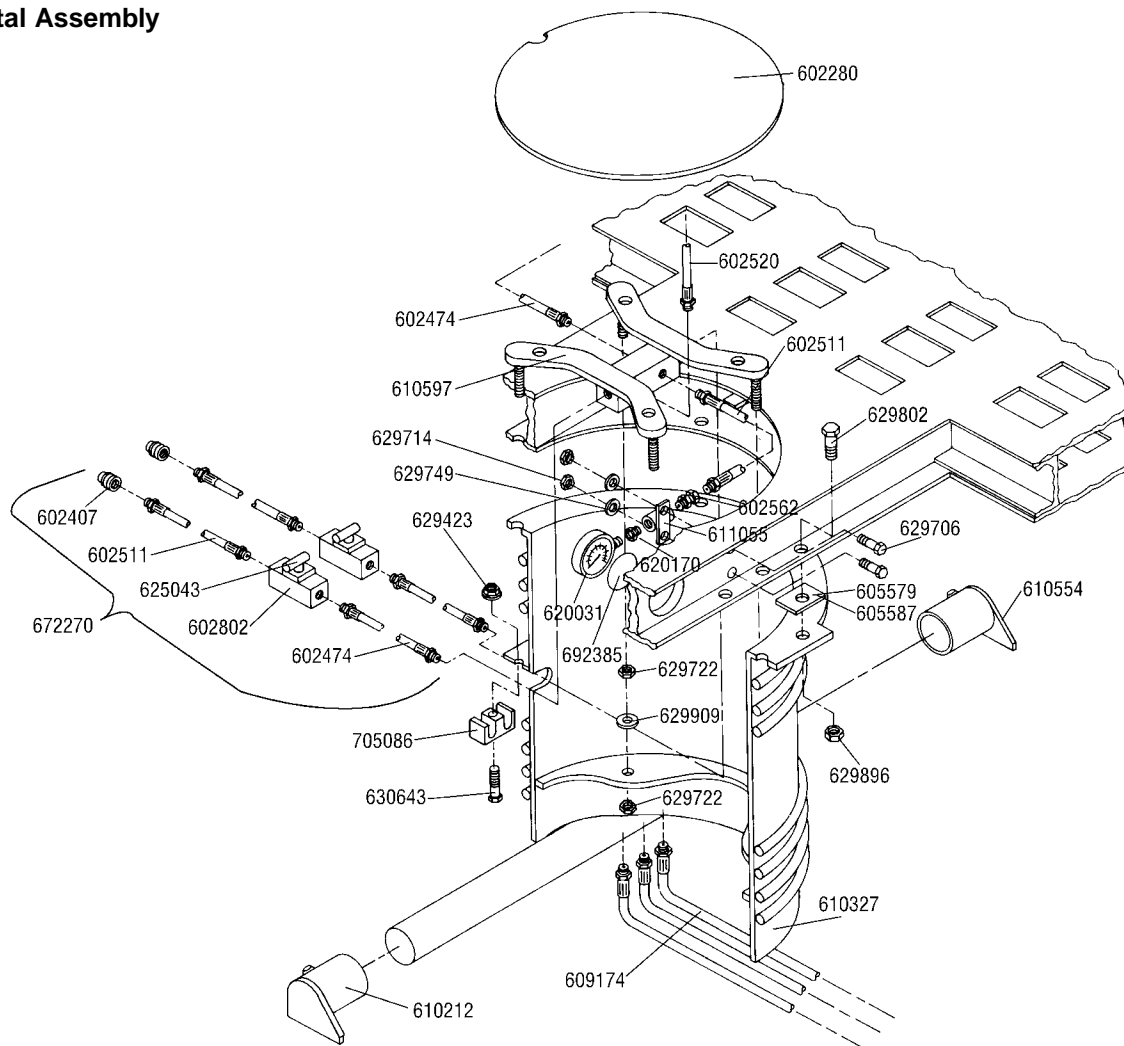
S21 EZ LINER PEDESTAL ASSEMBLY COMPONENTS (NEW)

PART NO.	DESCRIPTION
	Pedestal Assembly
602280	Pump Lid
610597	Pump Plate With Block
602520	Hose, Pump 59"
602511	Hose, 43"
611055	Gauge Mounting Plate
620031	Side Mount Gauge
610327	Pedestal (Fabricated, Machined)
602474	Lift Hose (Pedestal To Valve) 164"
602802	Auxiliary Line Valve
625043	Auxiliary Line Valve Handle

PART NO.	DESCRIPTION
625107	Auxiliary Line Valve Star Washer (Not Shown)
625115	Auxiliary Line Valve Nut Acorn (Not Shown)
602562	Swivel Coupler
609174	Hose, 3/8" x 76"
620170	3/8" x 1/4" Steel Bushing
629802	Bolt, 3/4" 10 NC x 1-1/4"
602511	Hose, 3/8" x 43"
605579	Pedestal Shim
605587	Pedestal Shim
629896	Jam Nut, 3/4"

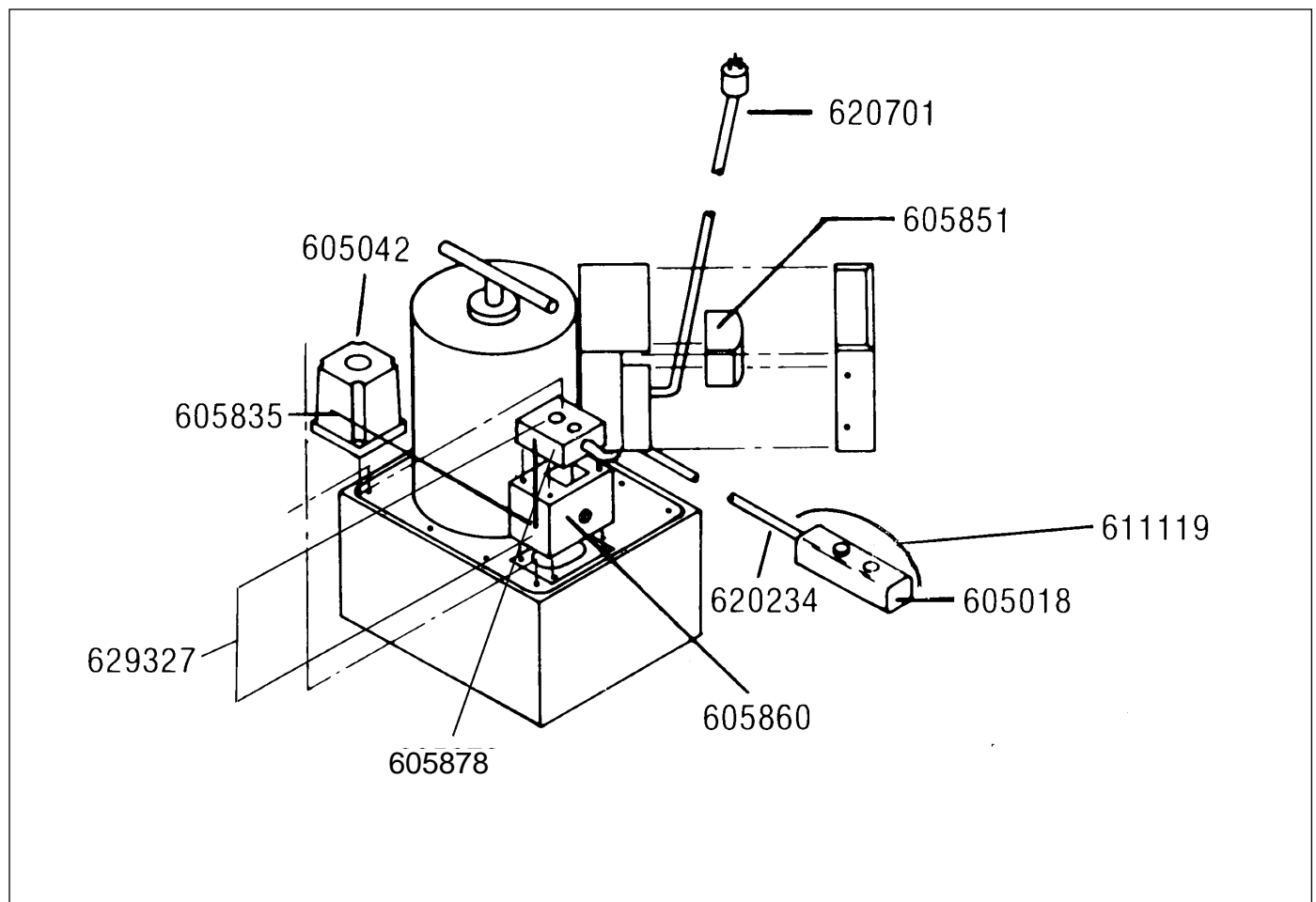
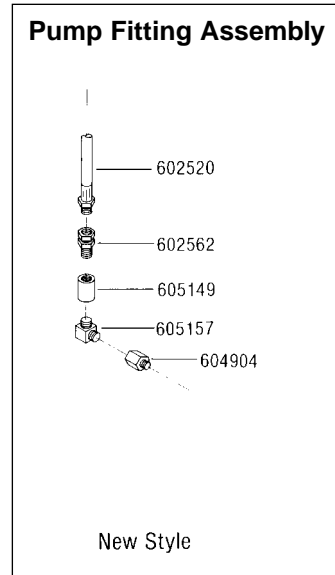
PART NO.	DESCRIPTION
610212	Pedestal Foot (Right)
610554	Pedestal Foot (Left)
602407	Quick Coupler, Male Half
629722	Nut, (Heavy Hex), 1/2"
629909	Washer, 1/2"
692385	Clear LOK Gauge Lens, 3 1/2"
672270	Auxiliary Line Assembly
629714	Nut, 5/16"
629749	Washer, 5/16"
629423	Nut, 1/4", Whiz Flange Lock
705086	Double Hose Clamp
630643	Bolt, 1/4" x 1 1/2"
629706	Bolt, 5/16" x 1 1/2"

Pedestal Assembly



S21 EZ LINER O.T.C MODEL PUMP ASSEMBLY COMPONENTS

PART NO.	DESCRIPTION
605843	O.T.C. Model
605835	Valve Body, Complete OTC
605851	Motor Starting Relay, OTC
605860	Valve Block, OTC
605878	Linkage Block
620701	Power Cord, 20', 15 AMP
605042	Solenoid
620234	Joy Cord Male, 21'
605018	Square "D" Switch
611119	Control Switch Assembly
629327	OTC Valve Body W/Linkage Base





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**Chief reserves the right to alter product specifications
and/or package components without notice.**