

# Chief Streamliner

PARTS MANUAL



## CHIEF'S LIMITED ONE-YEAR WARRANTY & LIABILITY

Chief Automotive Technologies warrants for one year from date of installation and/or purchase any component of its *Streamliner* Repair System 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 Technologies 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 Customer Service Department, Chief Automotive Technologies No returned merchandise will be accepted without an authorization number. All returned merchandise must be shipped freight prepaid (and may be subject to a handling and restocking charge) to:

Chief Automotive Technologies  
Attn: Returned Goods Dept.  
1924 E. Fourth St.  
P.O. Box 1368  
Grand Island, Ne. 68802  
308-384-9747

or

Your Authorized  
Chief Automotive Technologies  
Representative

**Parts Information**

To order replacement parts for the Streamliner System, refer to Parts Manual (Part No. 401625) and call Chief Automotive Technologies representative 308-384-9747. Refer to illustrations, descriptions and numbers included in the parts manual.

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

**CAUTION:** Always use Chief Automotive Technologies authorized replacement parts when servicing the Streamliner system.

**Electrical Components**

All electrical cords and components must be replaced with Chief Automotive Technologies authorized replacement parts.

**Hydraulic Hoses**

The 3/8" I.D., single wire hoses furnished with this product meet the requirements of SAE 100R1 AT, and have a working pressure of 3,000 PSI. They should not be used with any other system having a higher than 3,000 PSI output.

All hydraulic components must be replaced with Chief Automotive Technologies authorized replacement parts.

**Bolts/Fasteners**

All bolts and fasteners must be replaced with Chief authorized parts (Grade 5).

All bolts used in a pulling clamp that is frequently tightened must be Chief authorized bolts (Grade 8).

All bolt lengths and diameters shall be equal to factory installed dimensions.

**Chain**

The chains furnished with this product are a special alloy frame straightening chain designed exclusively for Chief Automotive Technologies, to meet the rigid requirements of the collision repair industry. They are proof tested to 20,000 lbs. (90kN) and have a working pressure of 10,000 lbs. (45kN). If replacement is required, purchase only the original Chief product from an authorized Chief Automotive Technologies representative.

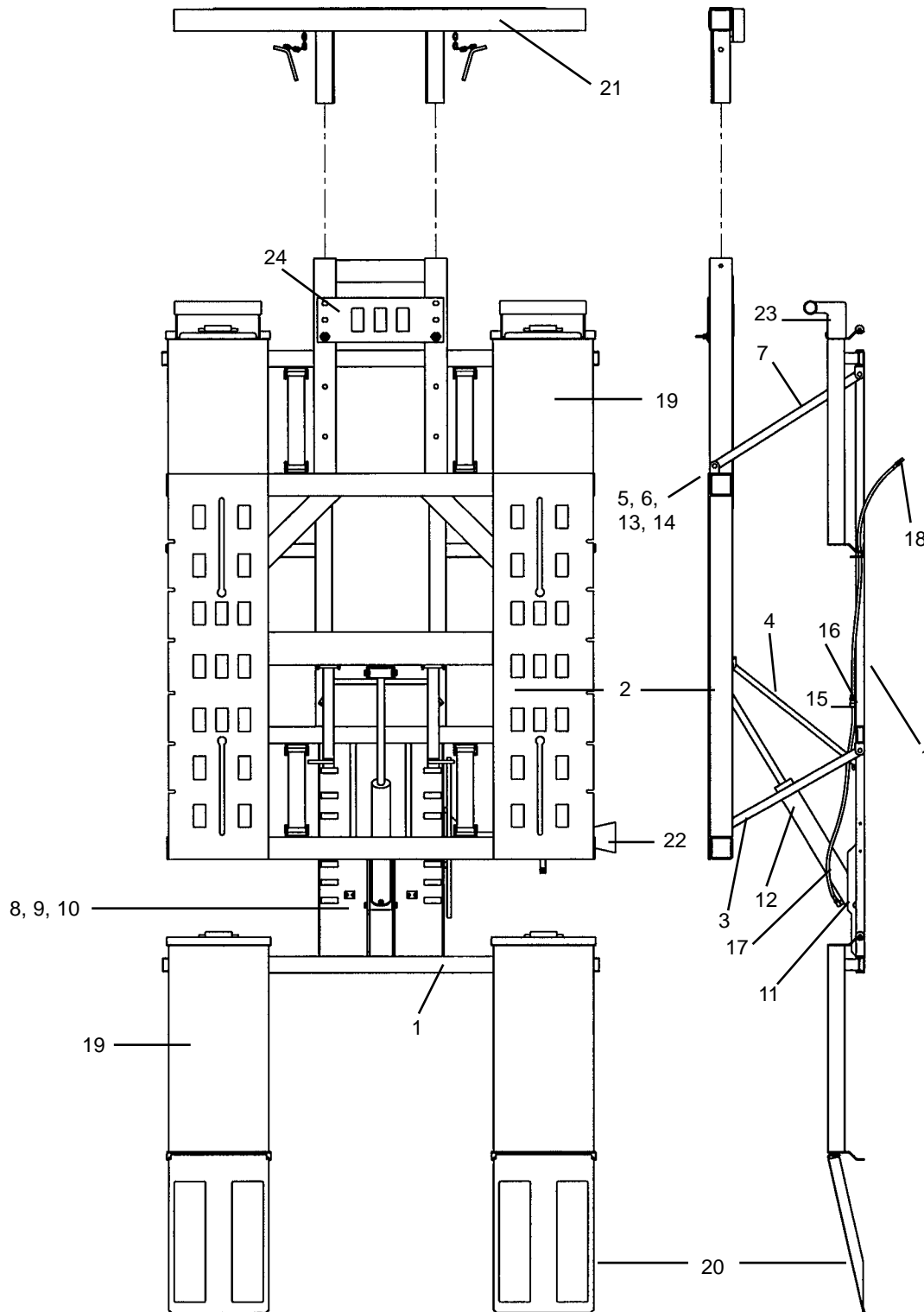
**Labels**

Replacement SAFETY and **CAUTION** WARNING labels are available in several languages any may be ordered by contacting Chief Automotive Technologies at 308-384-9747.

**Streamliner Specifications**

Mainframe weight (with tower).....	1,500 lbs. (700 kg)
Mainframe weight (without tower) .....	1,200 lbs. (545 kg)
Power Required.....	110 volt or 220 volt
Hydraulic Power.....	4 tons (35.6 kN) at 2,700 psi (180 Bar)
Hydraulic Fluid.....	5.7 L SUS215 viscosity, 100°F (38°C), 10W hydraulic fluid
Controls.....	Hand held unit on 30' of 16/3 cord
Length .....	12' 6" (3.8m); 15' (4.6m) with ramps
Width .....	6' 5.5" (2m)
Width (with tower at side).....	10' 2.5" (3.1m)
Height.....	5' 2.5" (1.6m) lowered; 7' 6" (2.3m) raised
Height (with tower ram extended up).....	8'2" (2.5m)
Working heights.....	6 1/2" (165mm); 9.5" (292mm); 16" (406mm); 19" (483mm); 21" (552mm); 24.5" (622mm); 26" (660mm); 27.75" (705mm).
Lift Capacity.....	5,000 lbs. (2,270 kg.)

Mainframe / Porta-Frame Components.....see parts list page 3

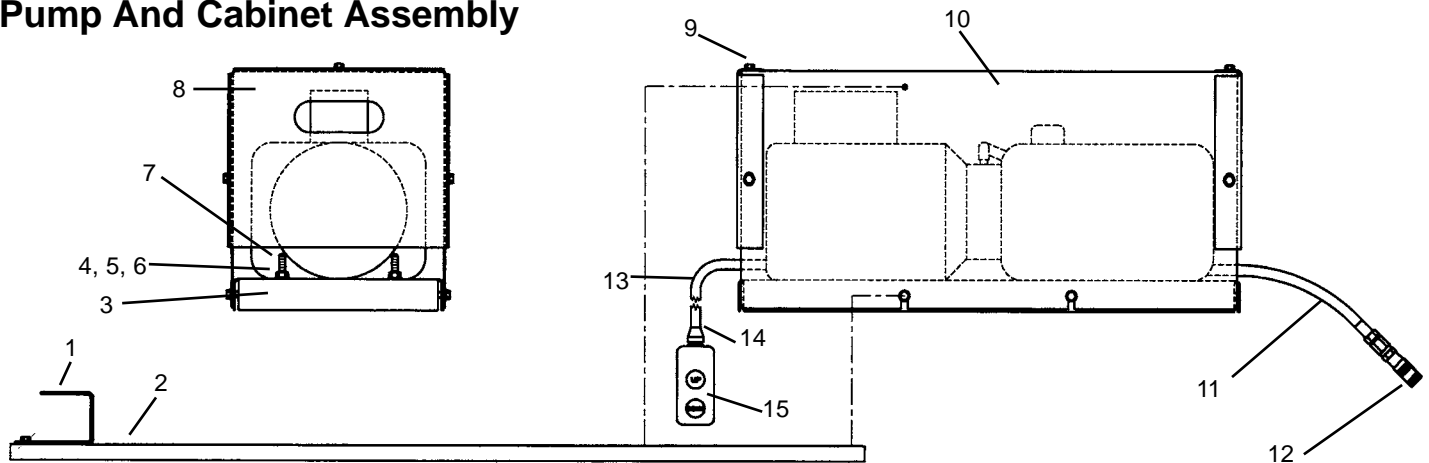


**Mainframe / Porta-Frame Components.....see illustration page 2**

Ref.	Part No.	Description
*	<b>401300</b>	<b>Porta-Frame/Mainframe complete</b>
1	401150	Porta-Frame Assembly
2	402160	Mainframe Assembly
3	401210	Rear Linkage
4	401220	Lock Arm Assembly
5	401224	Pin, 3/4 x 5 1/8 Long
6	401226	Nyliner Bearing
7	401205	Front Linkage
8	770123	Pin, Grooved, 1 x 5.813 Long
9	707479	Washer, 1", Thrust, Plated
10	770105	Retaining Ring, 1" Bar
11	401473	1/4" Street Elbow

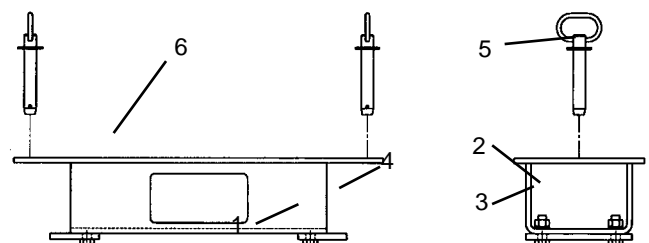
Ref.	Part No.	Description
12	401100	Cylinder, 3"
13	707452	Washer, 3/4", Thrust
14	401225	Retaining Ring, 3/4" Bar
15	092376	Clamp, 5/8 Hose
16	629888	Ty-Rap Cable Tie, Nylon, Black
17	401352	Hose, 108 x 3/8 NPT M x 1/4 NPT M
18	401058	Quick Connect, Male, Flat Face
19	401085	Treadway Extension
20	401060	Loading Ramp
21	401400	Mainframe Extension (Optional)
22	401450	Foot Lever Release Assembly
23	401064	Wheel Stops
	401275	Packaged Parts
24	402080	Crossmember, Complete

**Pump And Cabinet Assembly**

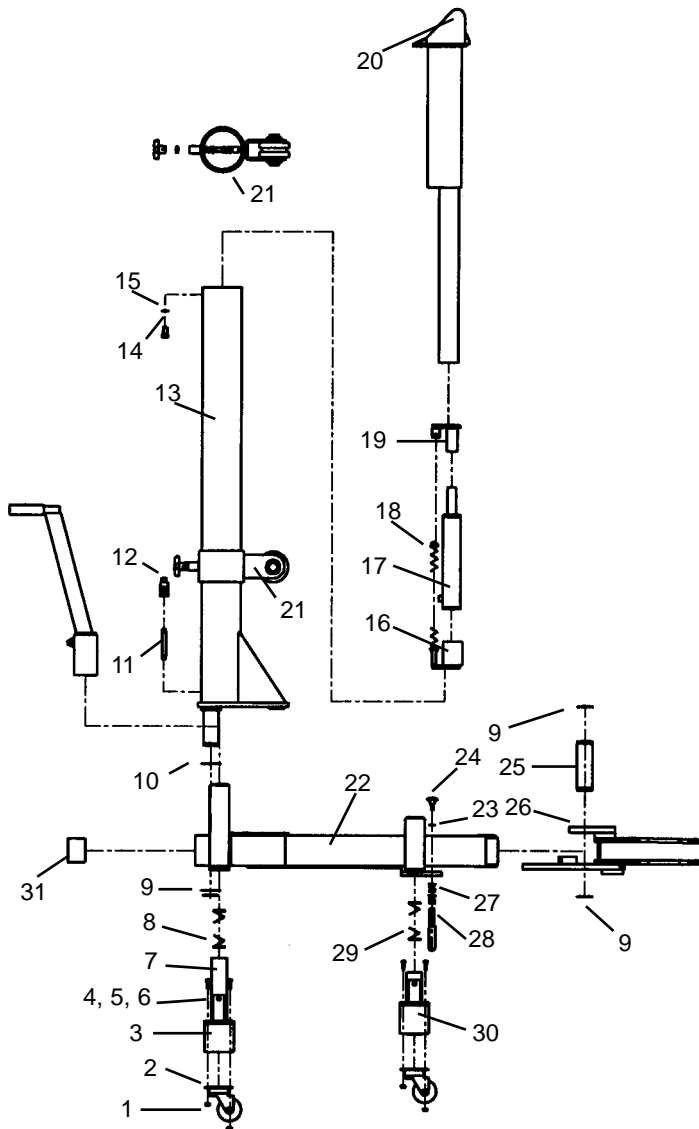


Ref.	Part No.	Description
	<b>401371</b>	<b>Pump / Cabinet Assembly</b>
1	657758	Cord Hanger, Cabinet
2	401364	Mount, Formed, Pump Cabinet
3	401361	Base, Formed, Pump Cabinet
4	756529	Screw, Hex Wash. Hd, 5/16 Flat
5	706847	Nut, 5/16-18NC SEMS KEPS
6	629749	Washer, 5/16 Flat
7	401366	Pump, 115 Volt, 2,600 PSI
	401365	Pump, 220 Volt, 2700 PSI
8	401363	End, Formed, Pump Cabinet
9	704075	Screw, 1/4-20 x 3/4 HWH
10	401362	Cover, Formed, Pump Cabinet
11	401353	Hose, 240" x 3/8 NPTF x 3/8 NPTM
12	401056	Quick Connect, Female, Flat Face
13	401636	Control Cord, 30', M.B. Pump
14	692270	Strain Relief Connector
15	605018	Control Switch

Ref.	Part No.	Description
1	693185	Bolt, 1/2 - 13 x 1-1/2, Gr. 8
2	620736	Nut, 1/2 - 13, Gr. 8
3	707436	Washer, 1/2" Lock
4	401072	Plate, Flat, 3/8 x 3 x 6-1/2
5	601914	Pin
6	402075	Crossmember



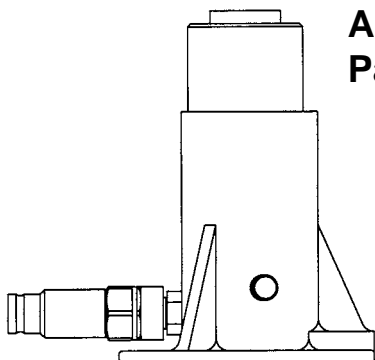
**Tower Assembly**



Ref.	Part No.	Description
	<b>401325</b>	<b>Tower Assembly With Chain</b>
1	629423	Nut, 1/4-20NC, Whiz Flange Lock, Pl.
2	401472	Caster, Swivel, 3" Wheels
3	401392	Wheel Mount, Rear, M.B.
4	692588	Bolt, 3/8-16 NC x 3/4, Gr. 5, Pl.
5	620744	Nut, Hex, 3/8-16, Gr. 5, Pl
6	629837	Washer, 3/8, Lock, Spring, Pl.
7	630635	Bolt, 1/4-20 NC x 1, Gr. 2. Pl.
8	401474	Compression Spring, Rear-MB Tower
9	401470	Retaining Ring, 2" BAR
10	401477	Shim, 2" ID x 1/32" Thick
11	402235	Long Pipe Nipple, 5400-6-3
12	401058	Quick Coupler, Male, Flat Face
13	402100	Tower Mast, Welded, Streamliner
14	010624	Bolt, 1/2-13 x 1, HHCS, Gr. 8
15	019095	Washer, Structural, 1/2" A325
16	402120	Tower Cylinder Base Assembly
17	401105	Tower Ram, Streamliner
18	401476	Spring, Extension
19	402130	Tower Cylinder Rod Attachment
20	402110	Tower Head, Streamliner
21	402140	Collar Assembly, Streamliner
22	401316	Tower Arm Welded, Streamliner
23	401481	Washer, 1/4" Series W, Pl.
24	401479	Push-Pull Knob, DK-52
25	401348	Pin, Grooved, 2 x 6 3/8 Long
26	401346	Tower Insert Assembly, Streamliner
27	092110	Spring, Compression, .720" x 1"
28	401480	Pin, 13/16, Streamliner
29	401475	Compression Spring, Front-Tower
30	401391	Wheel Mount, Front
31	401015	Tube, 2 1/4 dia. x 16 ga. x 3 1/2 Long
*	685206	Tower Chain
*	685206	Chain, 3/8" x 12

( \* Not Shown)

**Auxiliary Ram  
Package (Complete)**



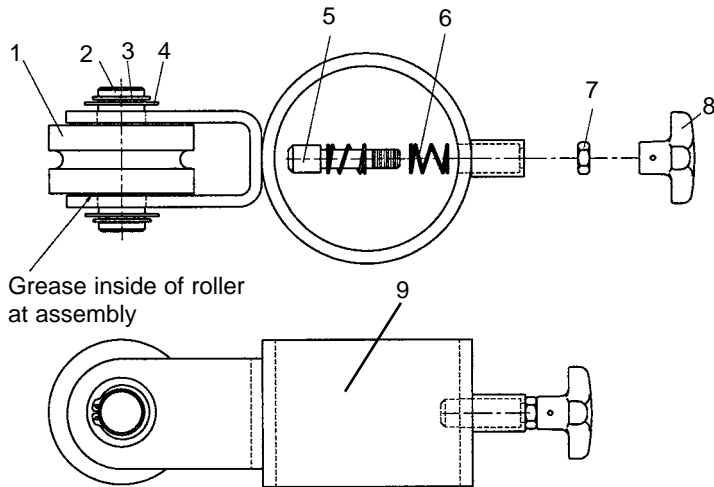
Part No.	Description
402250	Auxiliary Ram Package

**Auxiliary Ram Adapter**



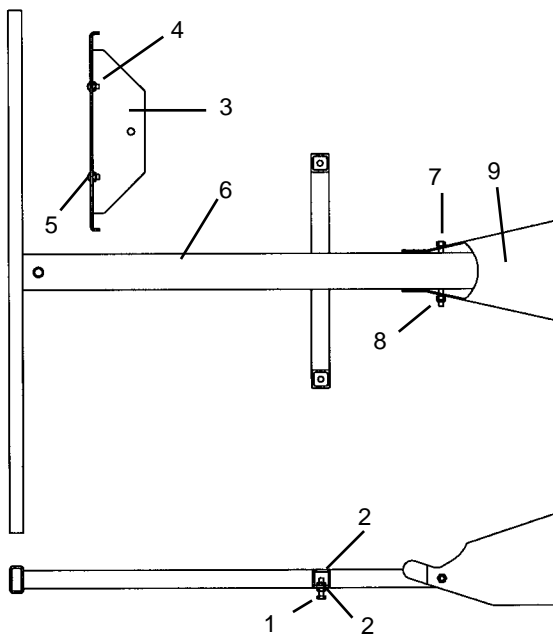
Part No.	Description
402245	Auxiliary Ram Adapter

### Collar Assembly



Ref.	Part No.	Description
	<b>402140</b>	<b>Collar Assembly</b>
1	680755	Roller, 4 x 3/8 Chain
2	680747	Pin, Grooved, Cast Collar
3	693468	Retaining Ring, Heavy Duty, Ext.
4	707487	Washer, 1 1/4", Flat, Pl.
5	401331	Pin, Collar, Streamliner
6	092110	Spring, Compression, .720" x 1"
7	620461	Nut, 1/2-13NC, Gr. 5 Pl, Hex Jam
8	644447	Cast Tower Knob, Pl.
9	402135	Collar, Welded

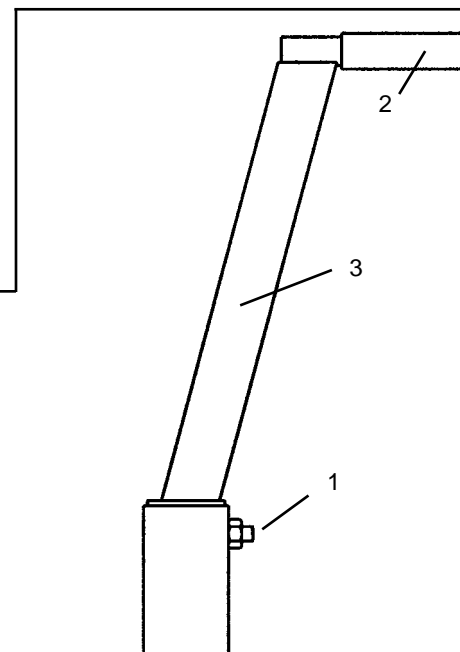
### Release Pedal Assembly



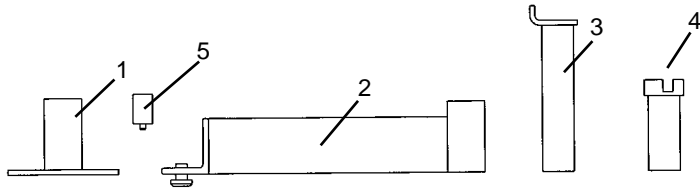
Ref.	Part No.	Description
	<b>401450</b>	<b>Release Pedal Assembly Package</b>
1	630635	Bolt, 1/4-20NC x 1, Gr. 2, Pl.
2	629247	Nut, 1/4-20NC, Gr. 2 Hex Pl.
3	401222	Foot Pedal Mt. Ass'y, Streamliner
4	629247	Nut, 1/4-20NC, Gr. 2 Hex Pl.
5	693783	Rd. Hd. Mach. Screw, 1/4-20 x 1/2
6	401072	Release Pedal Assembly
7	401229	Bolt, 1/4 - 20 NC x 3-1/4, Gr. 5
8	018129	Nut, Lock Hex, 1/4 - 20
9	401059	Foot Guard

### Tower Handle Assembly

Ref.	Part No.	Description
	<b>401384</b>	<b>Tower Handle Assembly</b>
1	697017	Set Screw, 1/2-13NC x 1 Long
2	657782	Handle Grip
3	401375	Tower Handle, welded

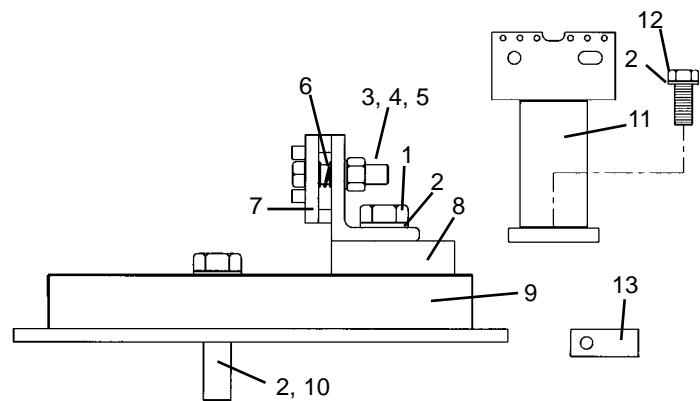


### Support Stands



Ref.	Part No.	Description
1	401067	Vertical Support Stand Base
2	401077	Offset Support Stand Base
3	401093	Frame Rail Support Stand Extension
4	401091	Pinchweld Support Stand Extension
5	402050	Safety Plug

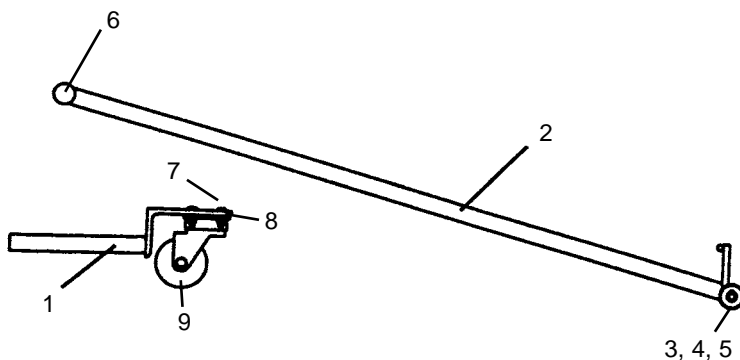
### Anchoring Stands



Ref.	Part No.	Description
*	<b>401420</b>	<b>Anchor Assembly</b>
1	401231	Bolt, M20 x 2.5 x 70mm HHCS
2	601738	Washer, 3/4 x 1 1/2 A-325
3	401234	Bolt, M14 x 2 x 60mm HHCS
4	401235	Nut, M14 x 2mm, Pl.
5	019095	Washer, Structural, 1/2" A325
6	092110	Spring, Compression, .720" x 1"
7	401250	Pinchweld Jaw, Metric
8	401096	Short Pinchweld Clamp Base
9	401088	Anchor Base, Welded
10	401230	Bolt, M20 x 2.5 x 90mm HHCS
11	401099	Tall Anchor Base (Optional)
12	401232	Bolt, M20 x 2.5 x 50mm HHCS
13	401227	Sliding Nut

(Part No. 401420 Does Not Include Ref. Nos. 11 And 12)

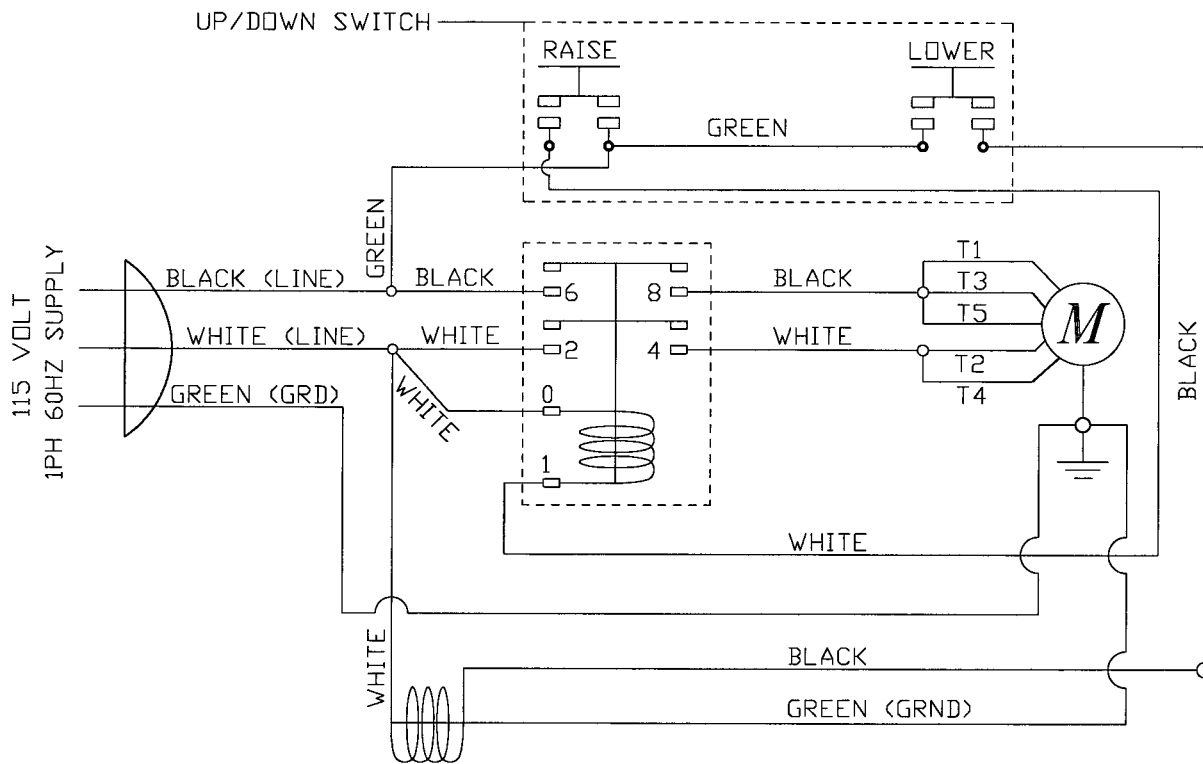
### Portability Package



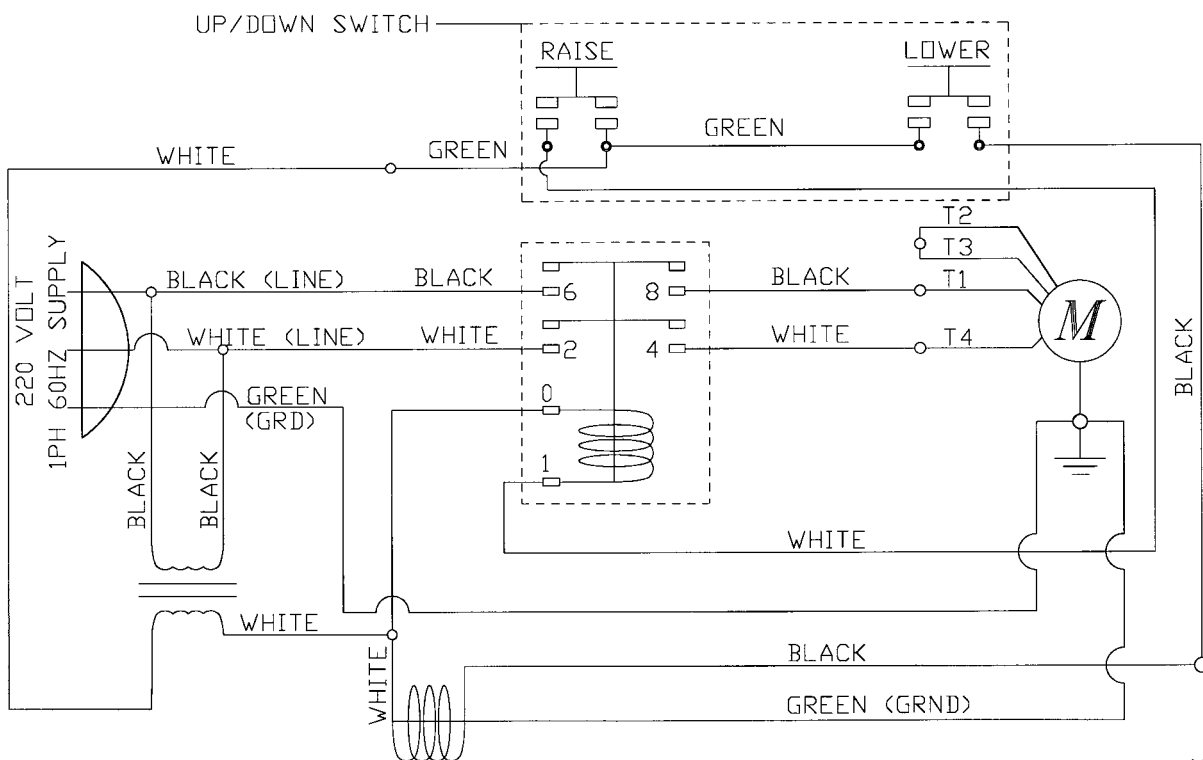
Ref.	Part No.	Description
	<b>401425</b>	<b>Portability Package</b>
1	401405	Caster Mount Assembly
2	401415	Lift Handle Assembly
3	401410	Roller, 1 1/2 dia. x 2 Long
4	629909	Washer, 1/2" Flat
5	401471	Retaining Ring, 1/2" Bar
6	657782	Grip, . 1" dia., Handle, Red
7	630635	Bolt, 1/4-20 NC x 1" Long
8	629423	Nut, 1/4-20 NC
9	401472	Caster, Swivel, 3" Wheel



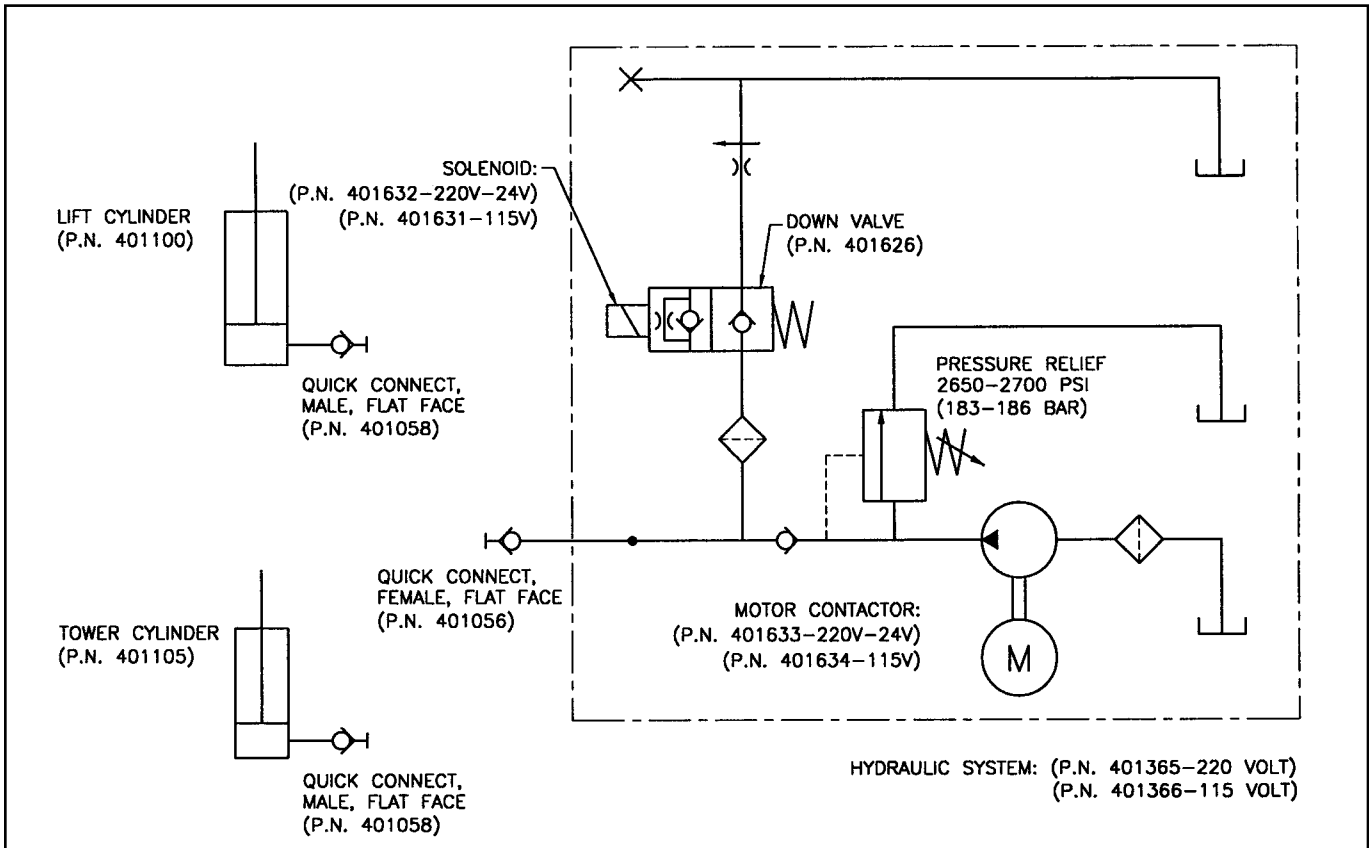
### Electrical Diagram (Streamliner), 115 Volt



### Electrical Diagram (Streamliner), 220 Volt



### Hydraulic Diagram (Streamliner)



### Decals / Labels (Streamliner)

Ref.	Part No.	Description
1	090754	LABEL...Tighten To 80 Ft. / Lbs. Max.
2	692107	LABEL...Serial Number
3	692136	DECAL... INTAIRCO Address (European Machines Only)
4	692140	DECAL...308-384-9747
5	692148	<b>CAUTION</b> ...Insert Treadway Extensions Prior To Loading And Unloading Vehicle
6	692149	<b>CAUTION</b> ...Insert Treadway Extension Here
7	692150	<b>CAUTION</b> ...Crossmember Safety
8	692151	<b>CAUTION</b> ...To Prevent Personal Injury Use Proper Bolt Length
9	692152	<b>CAUTION</b> ...To Prevent Injury Or Damage To Property (Entire Base Must Sit etc.)
10	692153	<b>CAUTION</b> ...To Avoid Personal Injury Or Property (Install Treadway Lock Insert)
11	692154	<b>CAUTION</b> ...To Prevent Personal Injury (Keep Feet Clear When Raising / Lowering)
12	692155	<b>CAUTION</b> ...To Prevent Personal Injury From Leaking Hydraulic Fluid
13	692156	<b>IMPORTANT</b> ...Filling Oil Reservoir
14	693337	<b>WARNING</b> ...Do Not Position Yourself Close To Or In Line With Chains, Clamps, etc.
15	693338	<b>WARNING</b> ...To Prevent Personal Injury From Fire & Explosion
16	693340	<b>CAUTION</b> ...To Prevent Personal Injury Check Condition Of Nuts, Bolts & Clamps, etc.

## Machine Maintenance

### **Check And Inspect Monthly And Anytime Problems Are Suspected**

**▲ CAUTION:** If mainframe is elevated during any service procedure, make certain the safety lock arms engage the lock arm stops.

#### Tower Chain

The chain furnished with this product is a special alloy frame straightening chain designed exclusively for Chief Automotive Technologies, to meet the rigid requirements of the collision repair industry. It is proof tested to 20,000 lbs. (90 kN) and has a working pressure of 10,000 lbs. (45 kN). If replacement is required, purchase only the original Chief product from an authorized Chief Automotive Technologies representative.

**▲ CAUTION:**

- 1) DO NOT heat chain or hook while repairing vehicle - 600° F (316 C) of heat weakens chain.
- 2) DO NOT tip load chain hook. Tip loading chain hook stresses hook beyond its designed capability and could cause it to fail.
- 3) DO NOT pull with twisted chain links. Pulling with twisted chain links stresses chain links beyond their designed capability and could cause them to fail.

With each use, inspect tower chain for wear, nicks, gouges, stretched and bent links. If found, replace chain.

With each use, inspect tower chain hook for twist and stretched opening. If found, replace chain hook.

#### Power and Control Cords

With each use, inspect power and control cords for worn insulation or other damage. If found, replace cord(s) with authorized Chief Automotive Technologies replacement parts.

#### Cleaning and Lubricating

Clean and lubricate components as specified for trouble-free and extended service .

Oil - Use motor oil for components requiring oil.

Grease - Use SUS 750 Lithium type grease (lubricant #630-2) for components requiring grease.

#### Tower Head

Grease tower head every six months.

1. Remove tower chain from tower head.
2. Extend tower head as far as possible.
3. Clean dirt from tower head pipe.
4. Apply thin film of grease to tower head pipe.

#### Tower Collar Assembly

Clean and lubricate collar assembly monthly.

1. Use compressed air to blow out dirt or dust that collects within roller assembly.

**▲ CAUTION:** Wear safety glasses while using compressed air to blow out dirt and dust.

2. Apply oil on roller pin between collar and roller assembly (each side). Then turn roller a few times. Roller must turn freely.

#### Lift Ram Assembly

Oil pivot points every two months

1. Clean dirt from pivot points.
2. Place a few drops of oil at each pivot point.

#### Lift Leg Assemblies

Oil pivot points every two months.

1. Clean dirt from pivot points.
2. Place a few drops of oil at each pivot point.

#### Eliminating Air In Hydraulic System

All air has been removed from hydraulic system at factory, but if hydraulic system is opened to replace a component, bleed air from system prior to using it.

#### Bleeding Air From System Beyond Quick Coupler

Contact an authorized Chief Automotive Technologies Service representative.



**P.O. Box 1368**  
**Grand Island, Nebraska 68802-1368**  
**Phone: 308/384-9747**  
**Fax: 308/384-8966**

**[www.chiefautomotive.com](http://www.chiefautomotive.com)**