



Tube-Line 5500

Parts & Service

Notes

Electric Solenoid valves can be manually operated by pushing a small punch into the end of spool and holding it in.

Caution Stay Away From Hoop When Engine Is Running

Inside of Control Panel , control relays are numbered CR1 to CR5 from left to right.

Relay CR1 is wired to table trigger. CR1 will activate solenoid valve to extend ram cylinder. CR2 is wired to switch at the front slider, when ram is extended to this switch CR2 will close, energizing the wrap motor valve. Ram cylinder will extend and wrap motor will turn until ram comes in contact with slider switch at rear, then CR1 and CR2 will turn off and CR3 will turn on. Wrap motor will stop and ram cylinder will retract until ram cylinder trips limit switch at front end of table. All controls will then turn off. Testing can be done by pushing trigger plate and wait until machine goes through cycle, or you can push small square button on the front of relay 1 and let machine go through cycle.

When control relays are activated a small light goes on inside the relay.

When running machine through the cycle and wrapper motor or the cylinders do not work, check flowcontrol valve to see if flow is going to both motor and cylinder.

Engine is stopped by grounding ignition, in case of ignition failure make sure that stop switch wire is not grounded to frame and engine switch is not in stop position.

Steering is controlled by switch right/left on control panel through CR4 and CR5 activating coil A or B on steering solenoid valve.

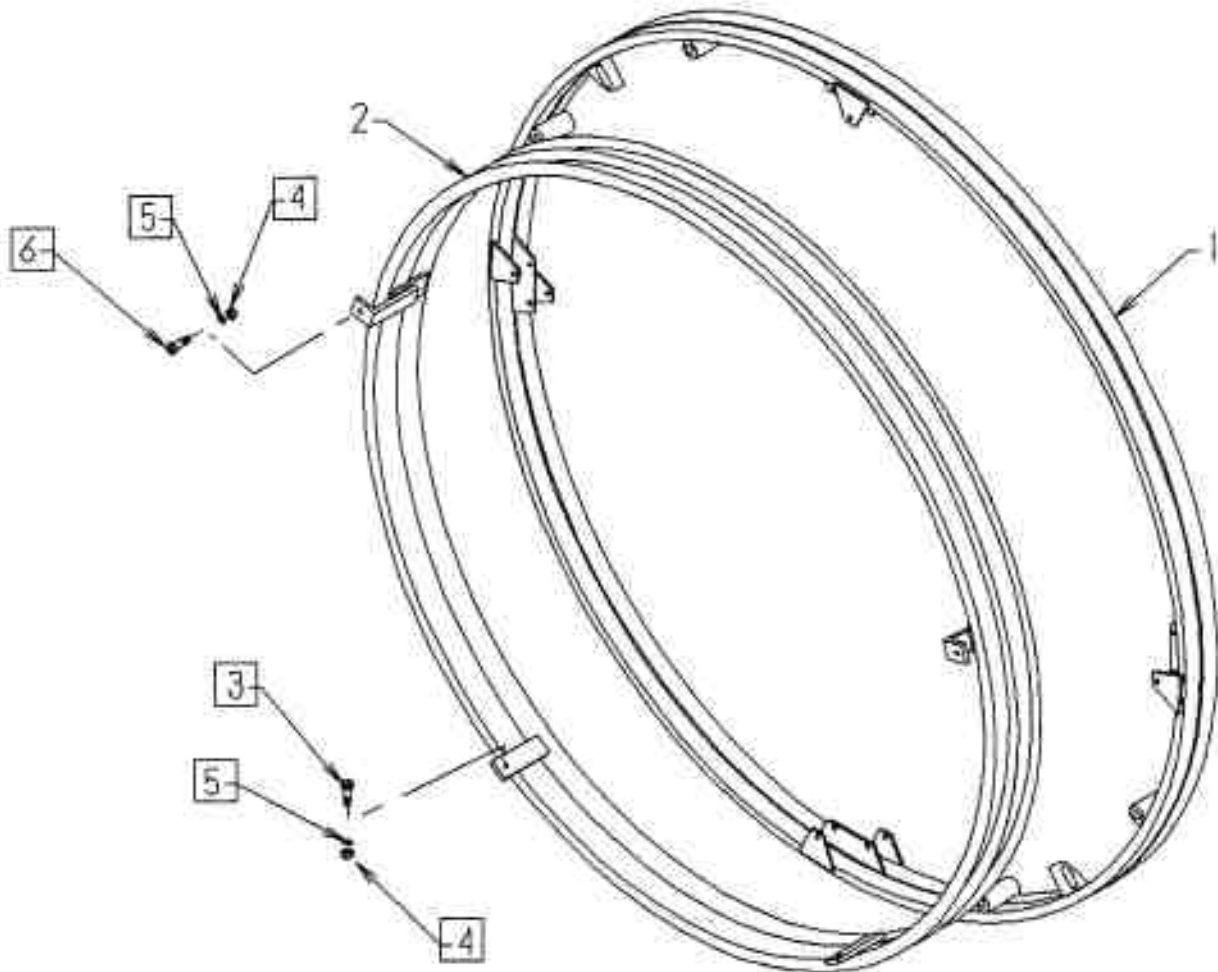
TUBE-LINE 5500

Parts Manual

Index

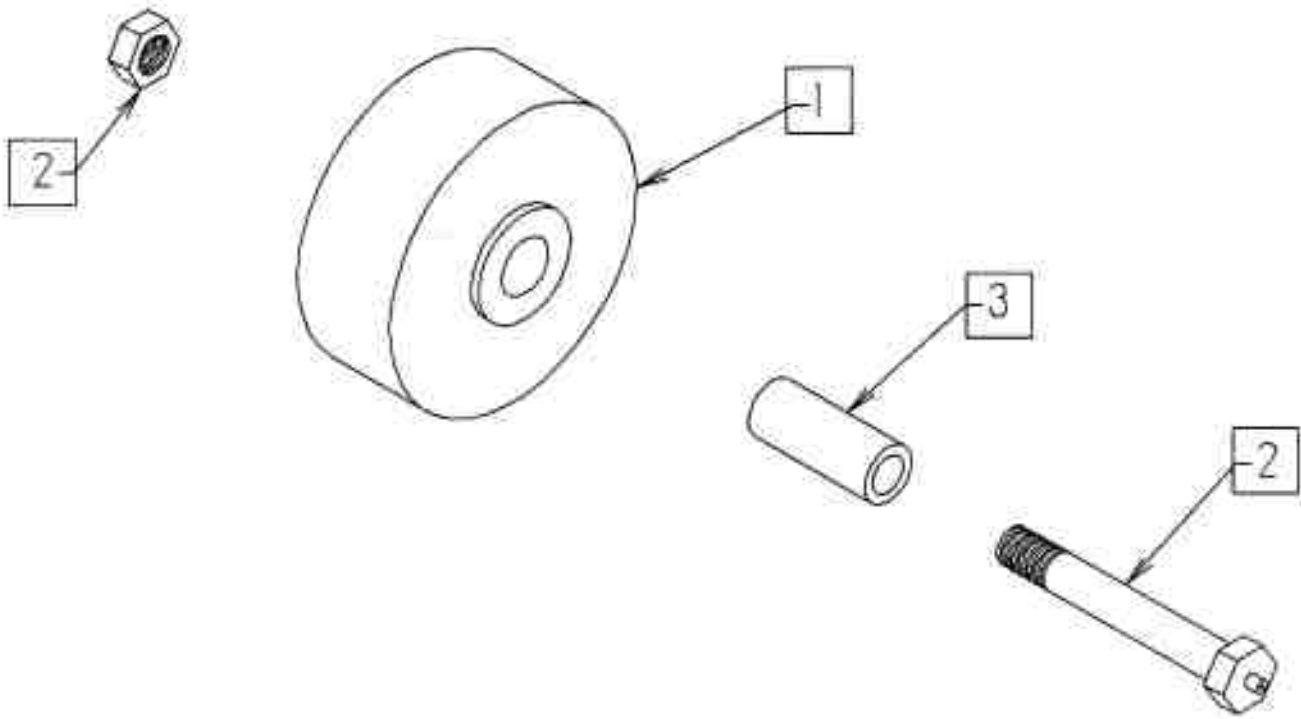
Item	Page #
Hoop _____	1
Hoop Wheels and Axle _____	2
Wrapper Hardware _____	3
Hoop Brace _____	4
Right hand Safety Mesh _____	5
Left Hand Safety Mesh _____	6
Drive Wheel & Hydraulic Motor _____	7
Hubs _____	8
Front Steering Assy	9
Brakes _____	10
Rear Roller _____	11
Tail _____	12
Bale Saddle _____	13
Ram _____	14
Push off _____	15
Pushoff Channel _____	16
Tongue _____	17
Mud Flap _____	18
Hydraulic Tank and Filter _____	19
Engine and Hydraulic Pump _____	20
Engine Cover and Decal Plate _____	21
Hydraulic Valve (manual) _____	22
Hydraulic Valve (electric) _____	23
Limit Switch _____	24
Control Panel _____	25
Bale Trigger and Battery Holder _____	26
Throttle _____	27
Running Lights	28
Hydraulic Schematic Diagram (manual	29
Hydraulic Schematic Diagram (electric)	30
Electric Wiring Diagram _____	31
Electric Schematic Diagram (electric)	32
Sequence Of Operation (manual) _____	33
Sequence Of Operation (electric) _____	34
Part Number _____	

Tube - Line 5500
Hoop



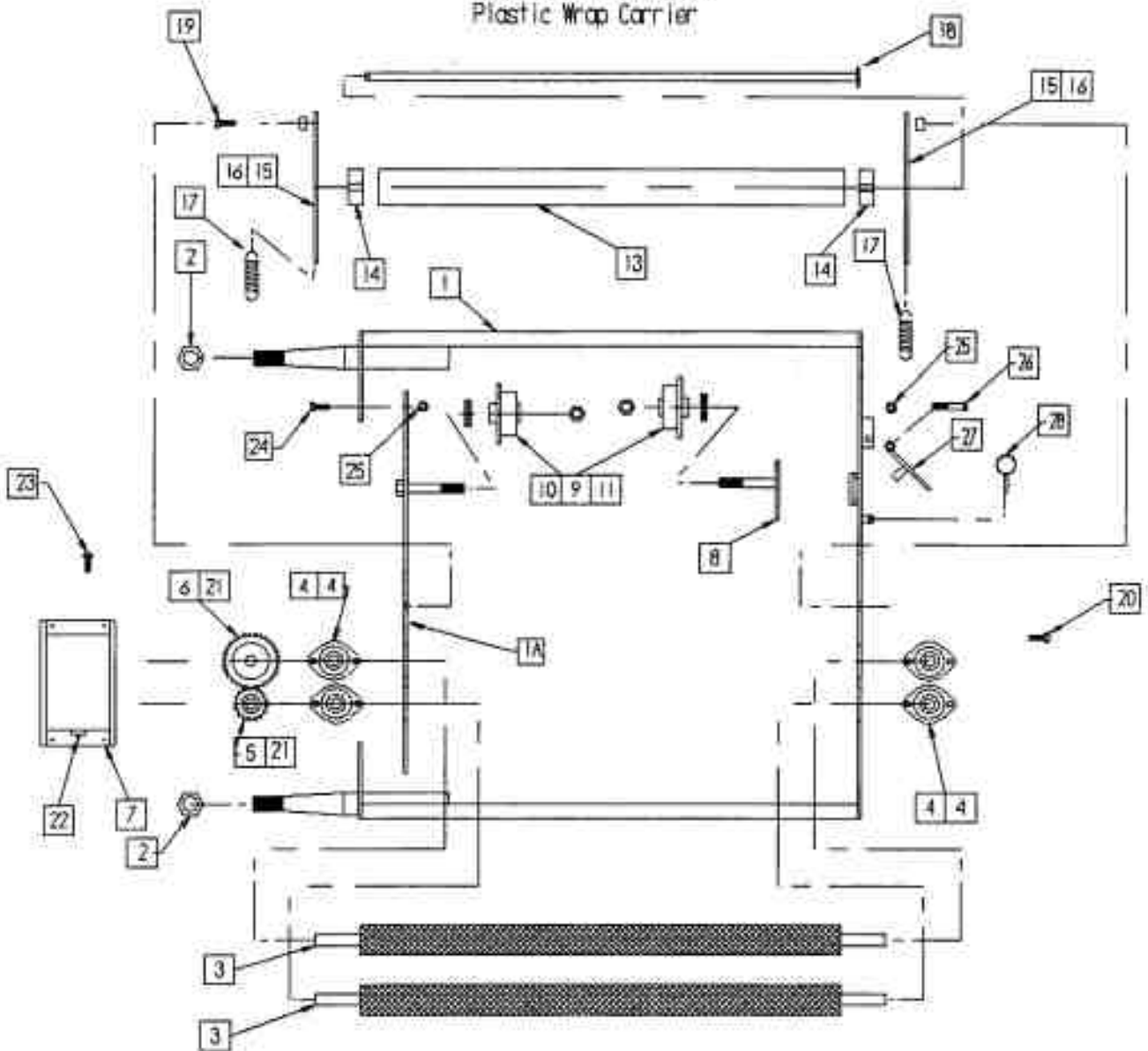
- | | |
|---|------------------|
| 1 | Outer Ring |
| 2 | Inner Ring |
| 3 | 5/8 x 2 Bolt |
| 4 | 5/8 Nut |
| 5 | 5/8 Lockwasher |
| 6 | 5/8 x 3 1/2 Bolt |

Tubeline 500
Hoop Wheels



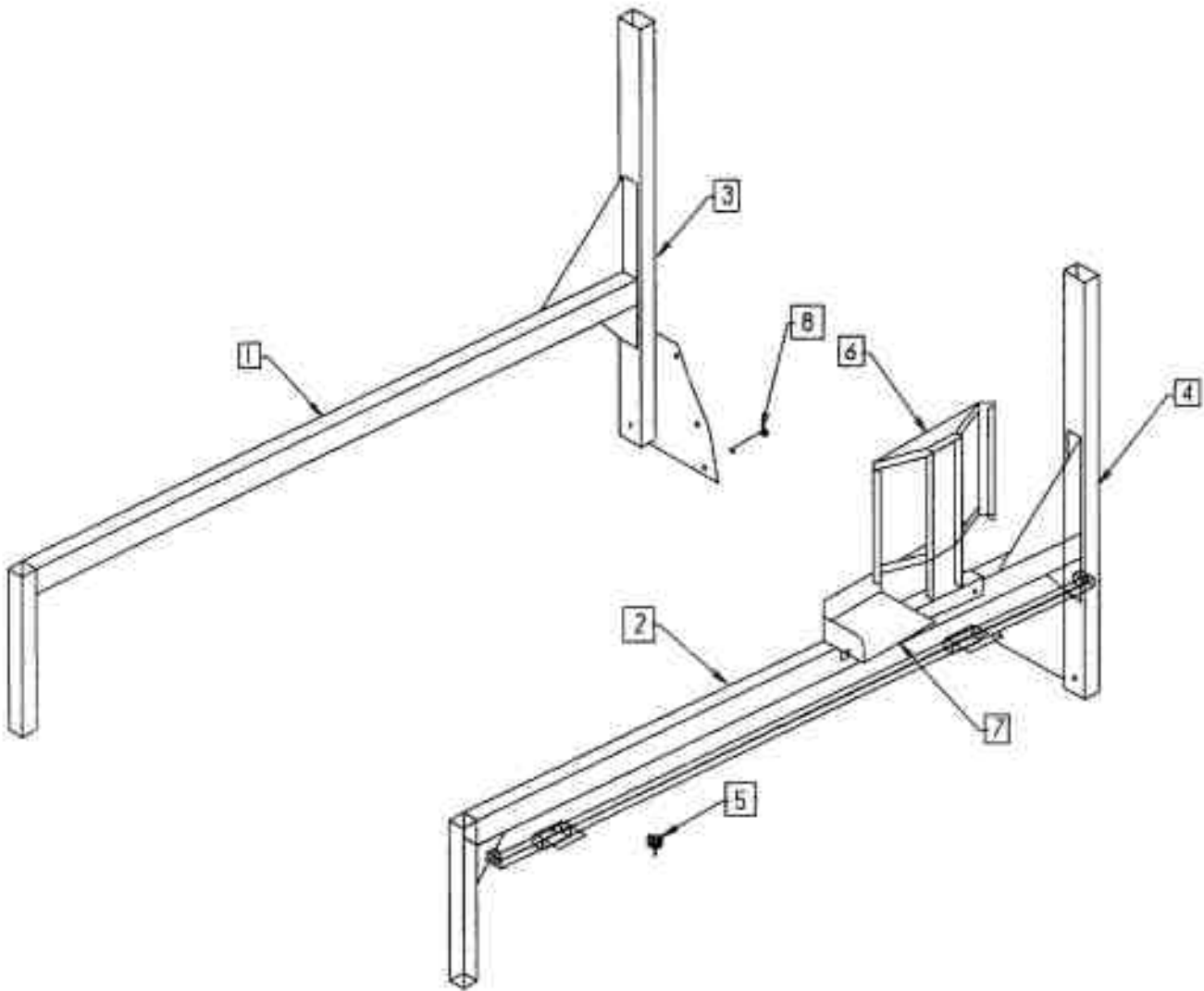
- | | |
|---|---------------------|
| 1 | 4 in Wheel |
| 2 | Axle Bolt / Locknut |
| 3 | Spanner |

Tube - Line 5500/6500
Plastic Wrap Carrier



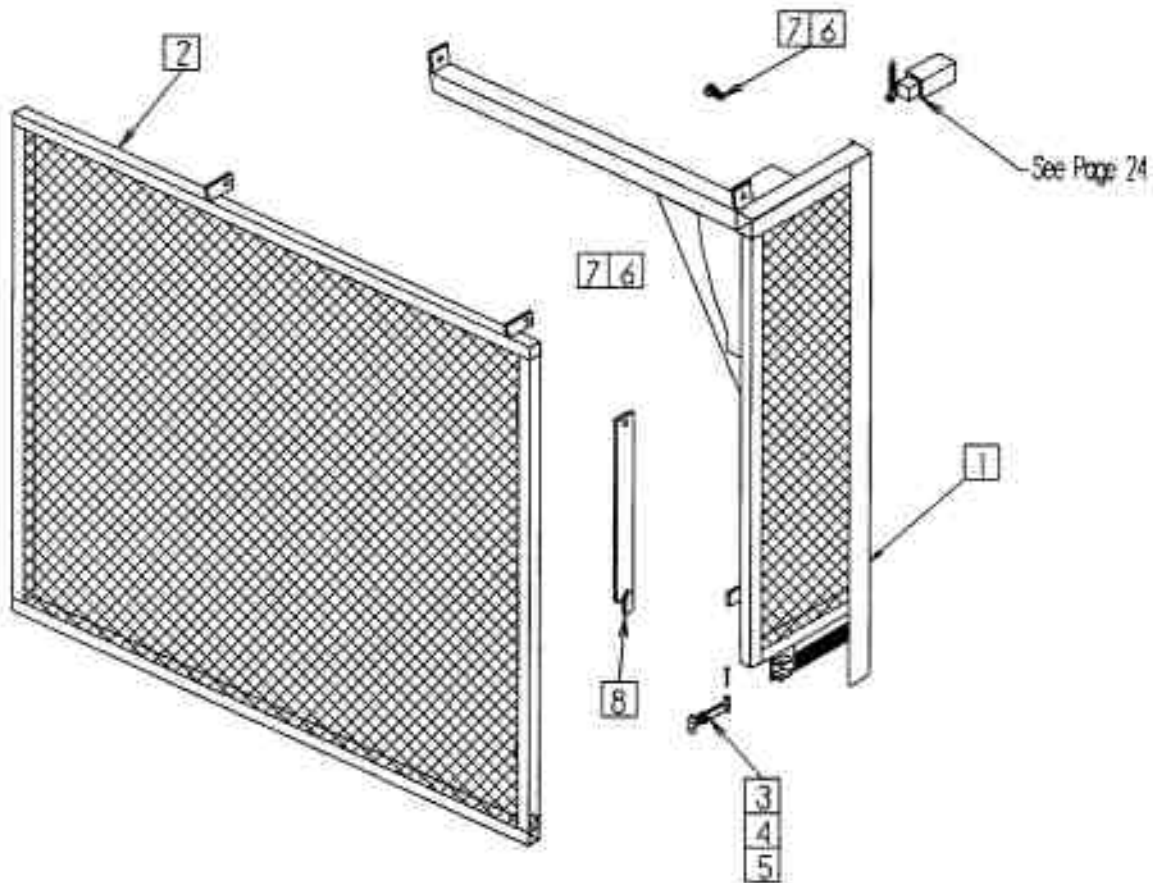
- | | | | |
|----|-----------------------|----|--------------------------|
| 1 | Main Wrap Bracket | 15 | ABS Bracket |
| 1A | Main Wrap Side Insert | 16 | Spacer |
| 2 | 1-14 UNF Casenut | 17 | Spring |
| 3 | Tensioner Roller | 18 | Axle Shaft |
| 4 | 3/4 Bearing | 19 | 1/2 x 2 Bolt |
| 5 | Small Gear | 20 | 5/16 Carriage Bolt |
| 6 | Large Gear | 21 | 3/16 Keystock |
| 7 | Gear Cover | 22 | Grease Fitting |
| 8 | Spool Holder | 23 | 10-24 x 3/4 Machine Bolt |
| 9 | Plastic Wrap Spool | 24 | 3/8 x 1 #5 Bolt |
| 10 | 5/8 Flat washer | 25 | 3/8 Locknut |
| 11 | 5/8 Nylocknut | 26 | 3/8 x 2 1/2 Bolt |
| 13 | ABS Pipe | 27 | Latch |
| 14 | HMPVC Bearing | 28 | 3/16 Linch Pin |

Tubeline 599
Hoop Brace Assy



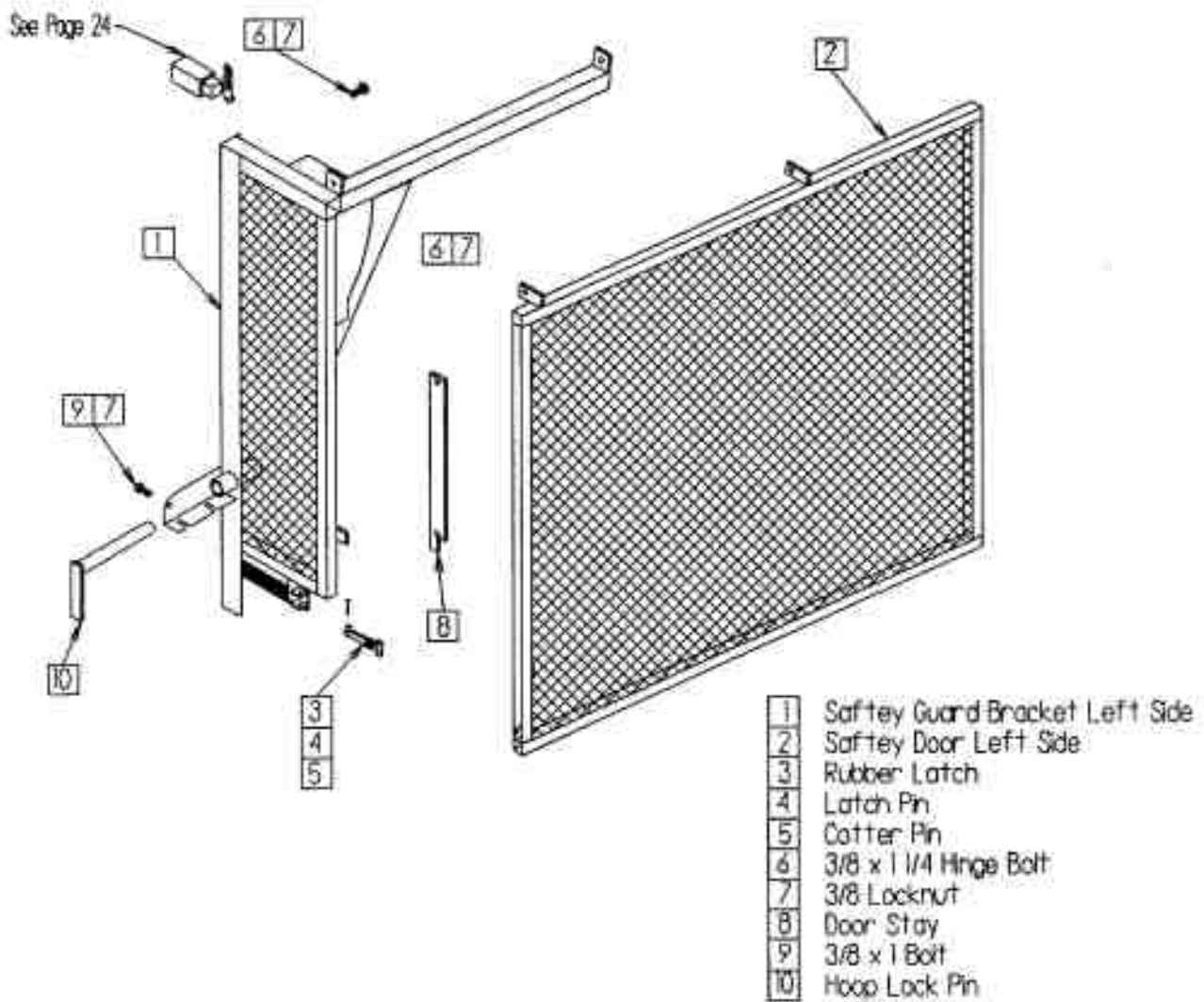
- 1 Right Hand Hoop Brace
- 2 Left Hand Hoop Brace
- 3 Right Hand Hoop Post
- 4 Left Hand Hoop Post
- 5 Switch Adjuster Screw
- 6 Automatic Control Panel Mount
- 7 Manual Control Mount
- 8 1/2 x 4 1/2 Bolt

Tubeline 5500
Right Hand Safety Guard

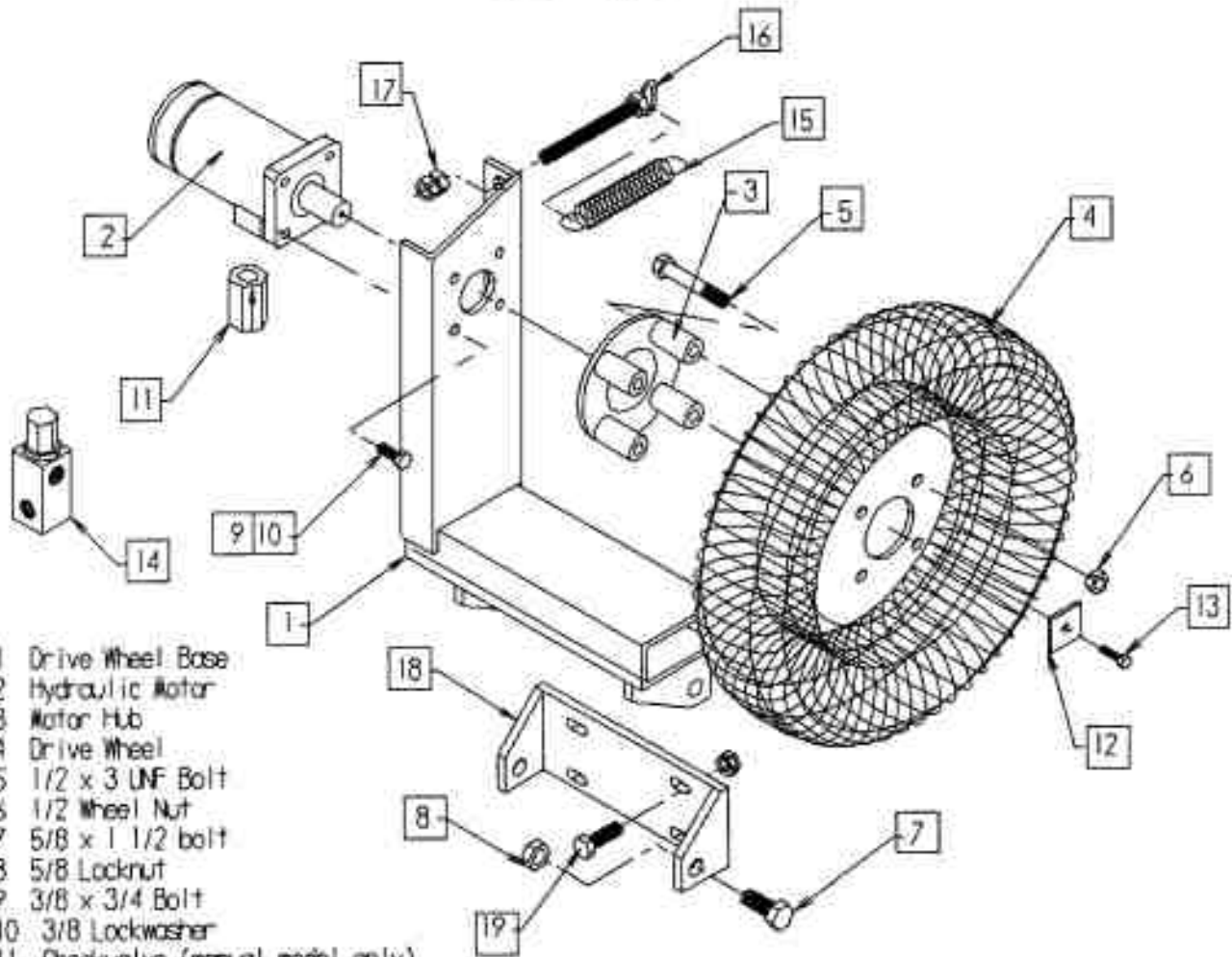


- | | |
|---|---------------------------------|
| 1 | Safety Guard Bracket Right Side |
| 2 | Safety Door Right Side |
| 3 | Rubber Latch |
| 4 | Latch Pin |
| 5 | Cotter Pin |
| 6 | 3/8 x 1 1/4 Hinge Bolt |
| 7 | 3/8 Locknut |
| 8 | Door Stay |

Tubeline 5500
Left Hand Safety Guard



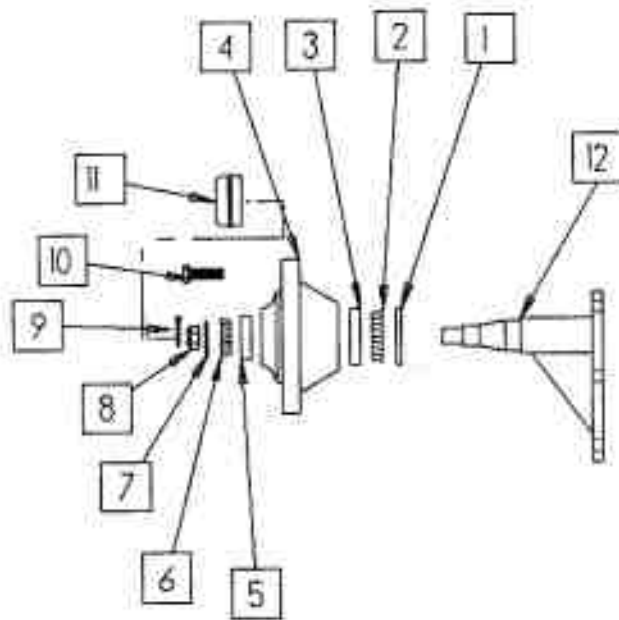
Tubeline 5500 Drive Wheel



- 1 Drive Wheel Base
- 2 Hydraulic Motor
- 3 Motor Hub
- 4 Drive Wheel
- 5 1/2 x 3 UNF Bolt
- 6 1/2 Wheel Nut
- 7 5/8 x 1 1/2 bolt
- 8 5/8 Locknut
- 9 3/8 x 3/4 Bolt
- 10 3/8 Lockwasher
- 11 Checkvalve (manual model only)
- 12 Wheel Washer
- 13 1/4 x 1 Bolt c/w Lockwasher
- 14 Relief Valve (manual model only)
- 15 Wheel Tensioner Spring
- 16 Spring Tensioner Bolt
- 17 1/2 Nuts
- 18 Drive Wheel Base Bracket
- 19 3/8 x 1 1/2 bolt c/w nut, washer & lockwasher

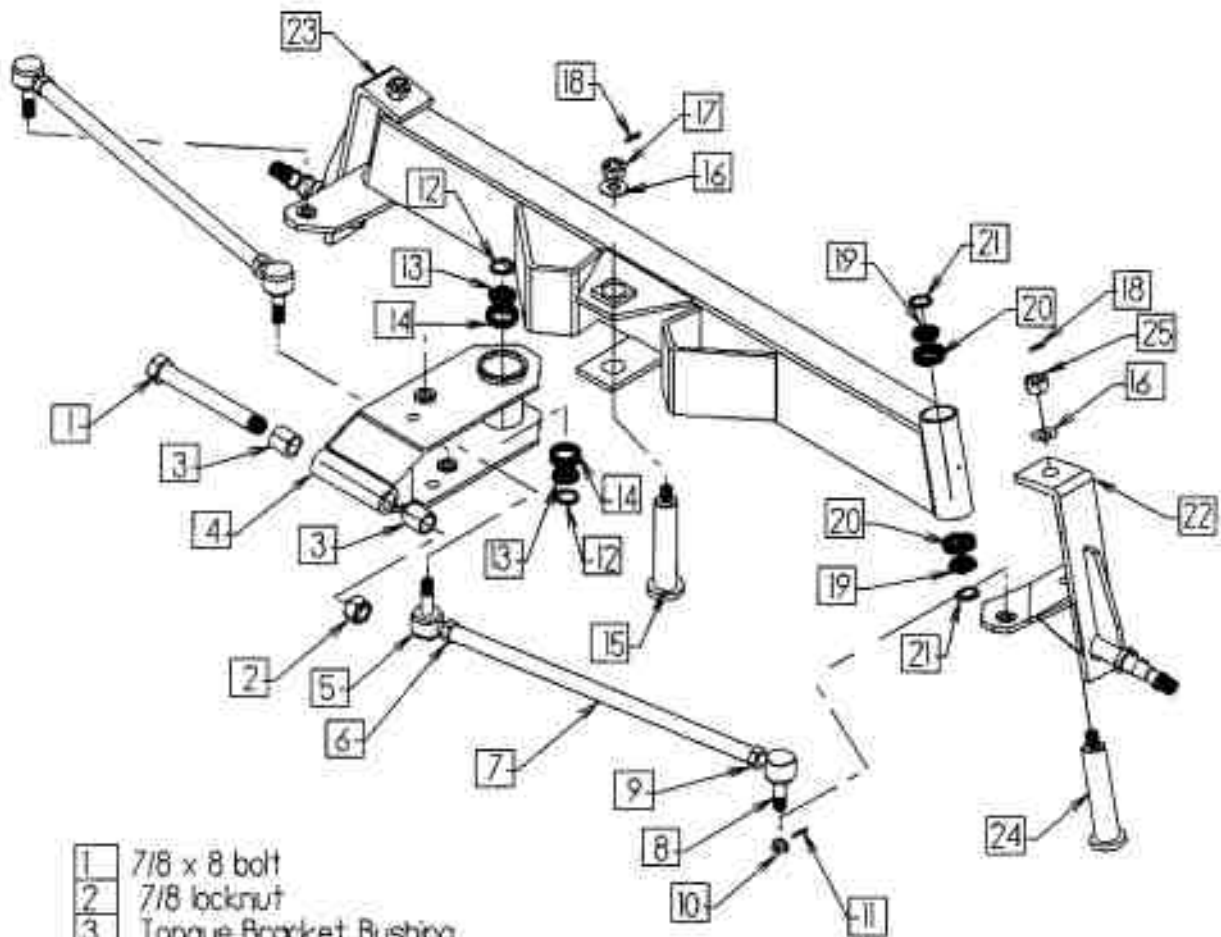
Tube-Line 550

Axle/spindle/hub



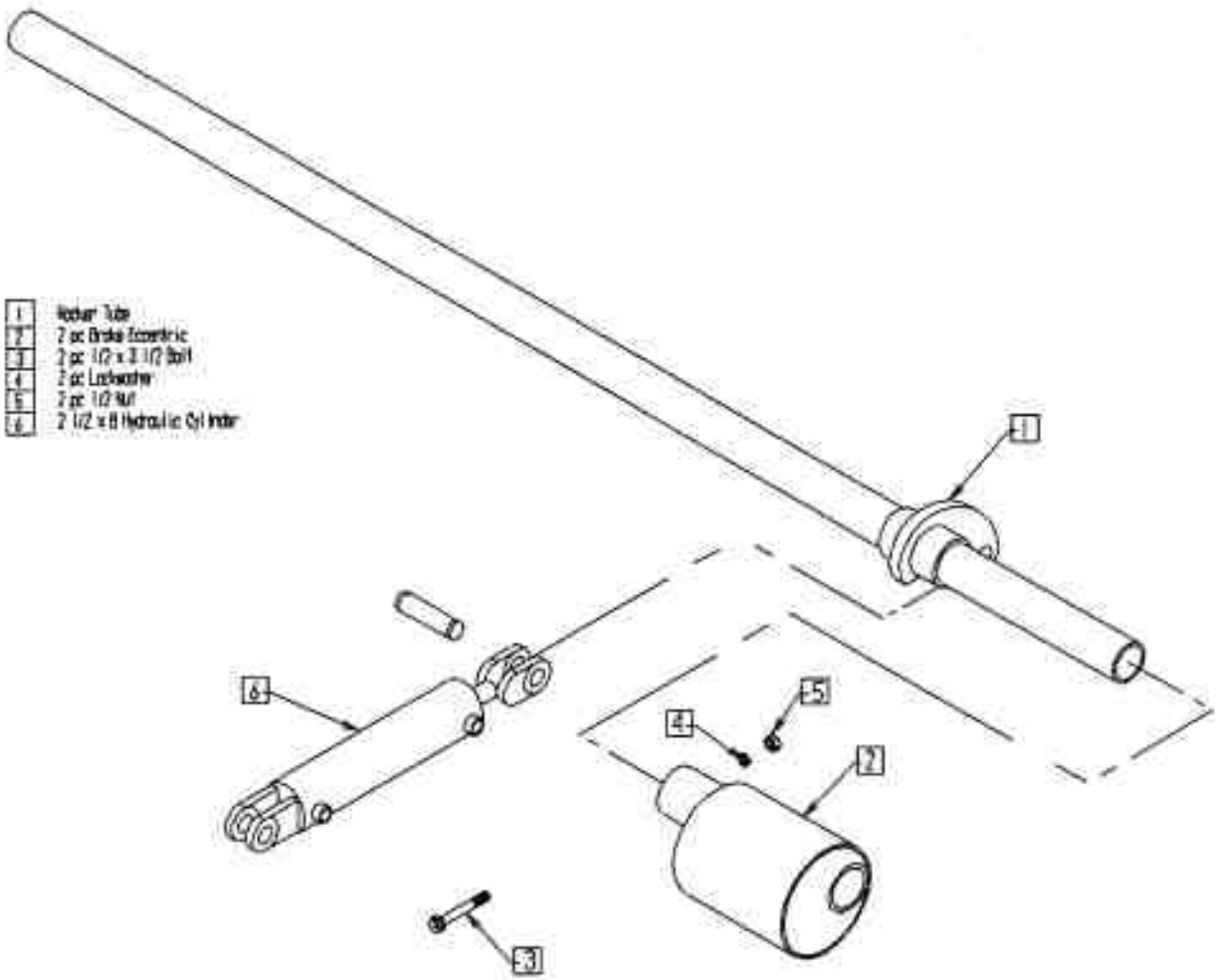
1	seal
2	inner bearing
3	inner bearing race
4	hub
5	outer bearing race
6	outer bearing
7	flat washer
8	wheel nut
9	cotter pin
10	wheel stud
11	dust cap
12	Spindle

TubeLine 5500
Front Steering Assy

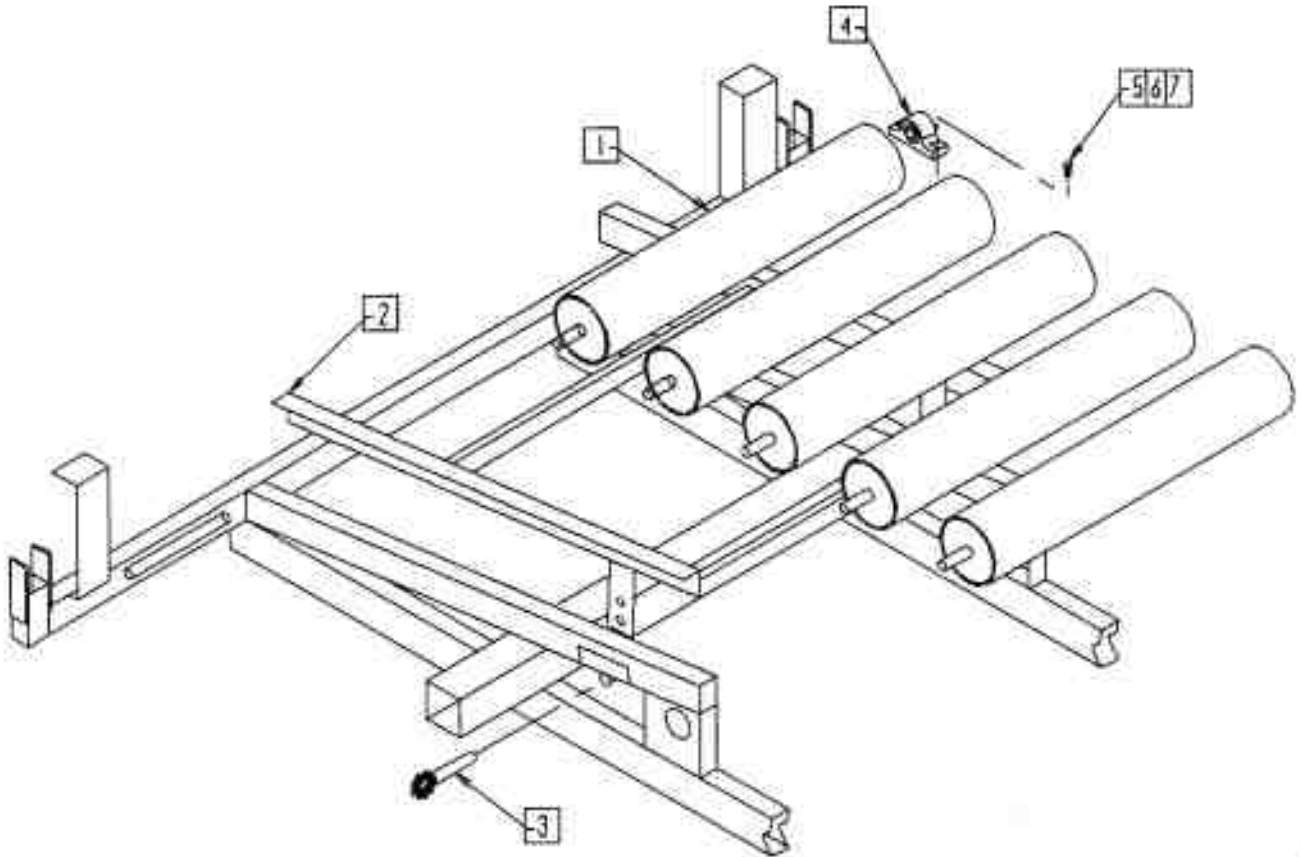


- | | |
|----|-------------------------------|
| 1 | 7/8 x 8 bolt |
| 2 | 7/8 locknut |
| 3 | Tongue Bracket Bushing |
| 4 | Tongue Bracket Assy |
| 5 | Tie Rod End - Right Thread |
| 6 | 3/4 Jam Nut (NF RH) |
| 7 | Tie Rod |
| 8 | Tie Rod End - Left Thread |
| 9 | 3/4 Jam Nut (NF LH) |
| 10 | 9/16 NF Slotted Hex Nut |
| 11 | 1/8 x 1 Cotter Pin |
| 12 | Tongue Bracket Seal |
| 13 | Tongue Bracket Timkin Bearing |
| 14 | Tongue Bracket Timkin Cup |
| 15 | Tongue Bracket Pin |
| 16 | 13/16 Flat Washer |
| 17 | Tongue Bracket Nut |
| 18 | 3/16 x 2 Cotter Pin |
| 19 | Spindle Bearing Timkin Cone |
| 20 | Spindle Bearing Timkin Cup |
| 21 | Spindle Bearing Seal |
| 22 | Left Side Spindle Assy |
| 23 | Right Side Spindle Assy |
| 24 | Spindle Pin |

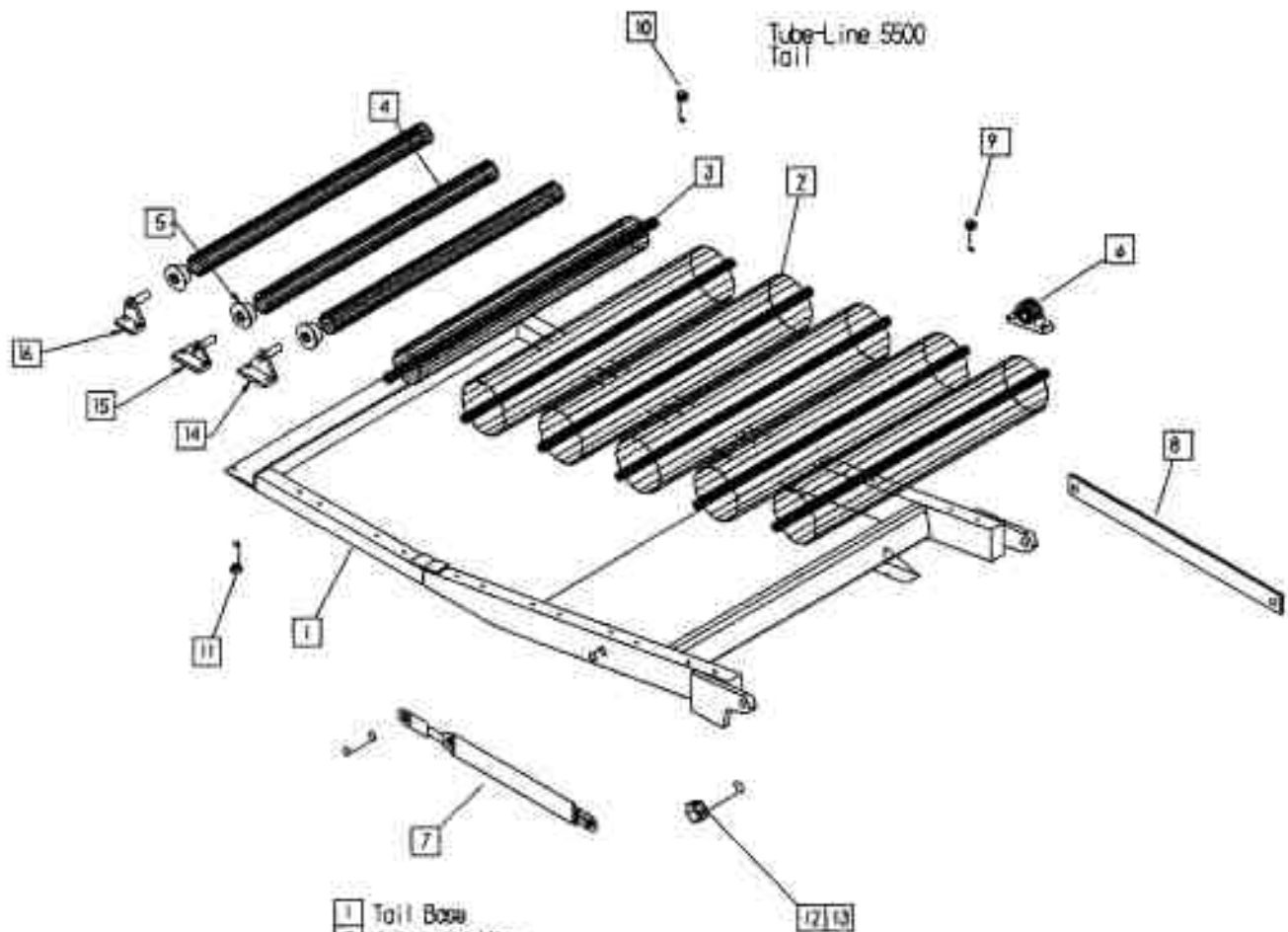
Tube-Line 5500
Brakes



Tube-Line 9800
Rear Roller

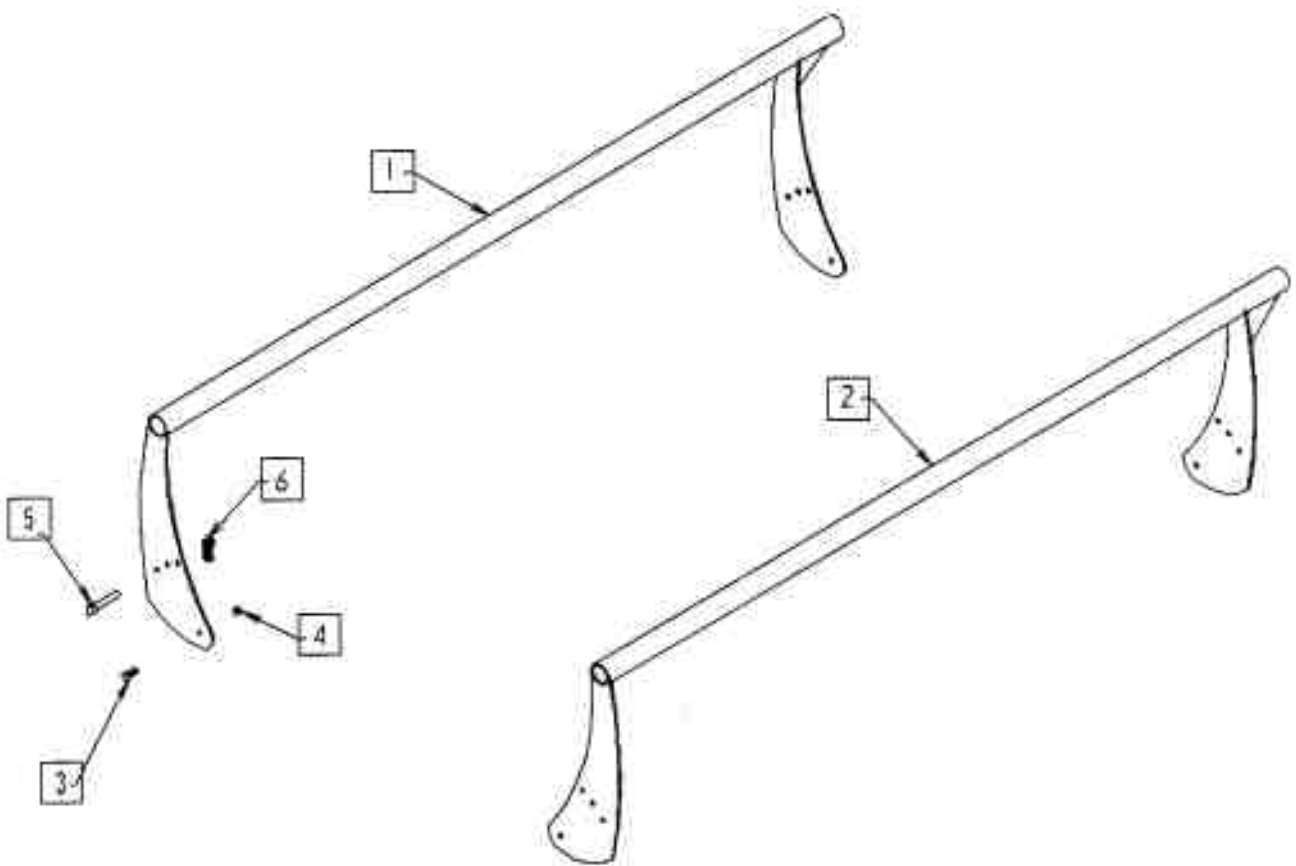


- | | |
|---|------------------------|
| 1 | 5 Large Roller |
| 2 | Riser frame |
| 3 | Riser Lock Pin |
| 4 | 1" Bearing |
| 5 | 20 pc 3/8 x 1 1/2 Bolt |
| 6 | 20 pc 3/8 Lockwasher |
| 7 | 20 pc 3/8 Flatwasher |



- | | |
|----|----------------------------|
| 1 | Tail Base |
| 2 | 4 large roller |
| 3 | 1 pc 4' roller |
| 4 | 2 pc 2 7/8" roller |
| 5 | 4 pc 3/4" bearing |
| 6 | 10 pc 1" bearing |
| 7 | 3 x 12 hydraulic cylinder |
| 8 | tail tie bar |
| 9 | 3/8 x 1 1/2 bolt |
| 10 | 5/16 x 1 bolt |
| 11 | 4 pc 5/16 x 1 1/2 bolt |
| 12 | 2 pc 1 x 3 1/2 bolt |
| 13 | 2 pc 1" Nylocknut |
| 14 | First Small Roller bracket |
| 15 | 2nd Small Roller Bracket |
| 16 | Last Small Roller bracket |

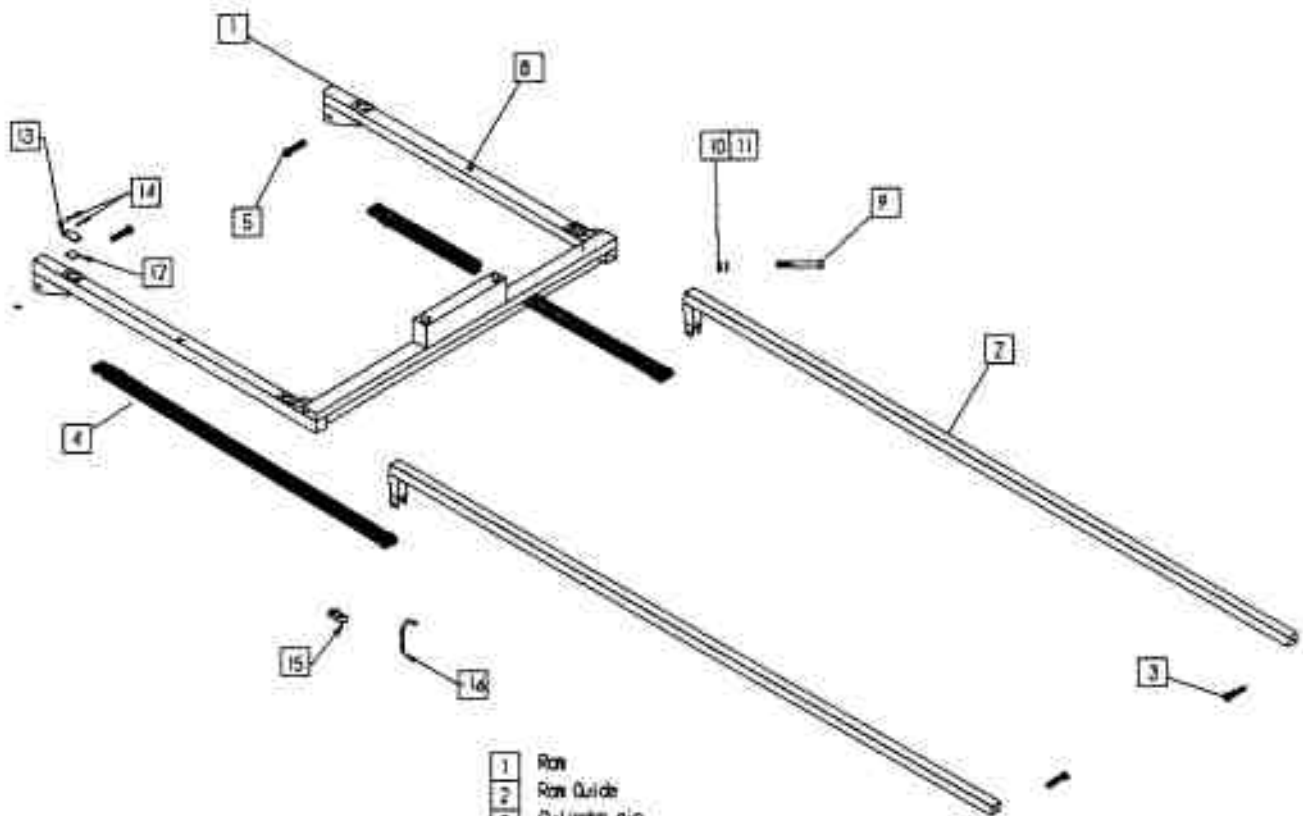
Tubeline 5500
Bale Saddle



- 1 Bale Saddle (Right Side)
- 2 Bale Saddle (Left Side)
- 3 1/2 x 1 1/4 Bolt
- 4 1/2 Locknut
- 5 1/2 in pin
- 6 3/16 Lynch Pin

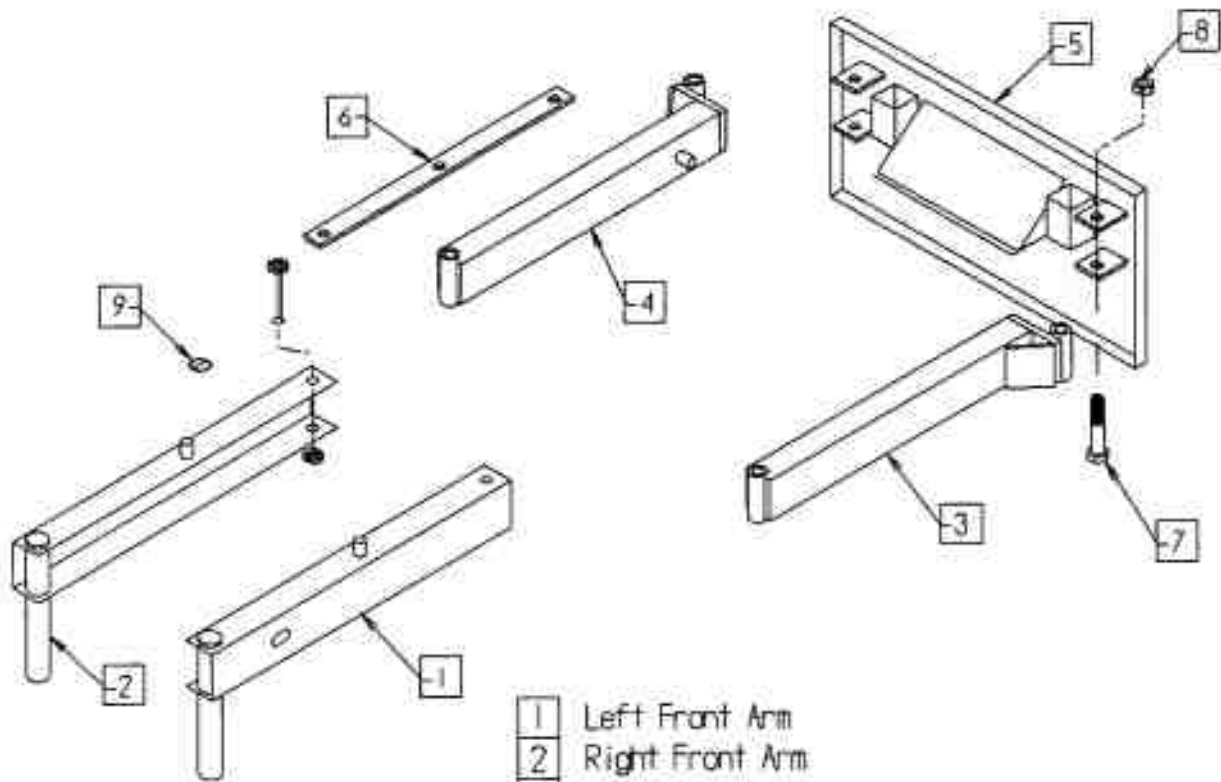
Tube-Line 5500

Ram



- | | |
|----|-------------------------------|
| 1 | Ram |
| 2 | Ram Guide |
| 3 | Cylinder pin |
| 4 | Roller cylinder |
| 5 | 3/4 x 2 Bolt |
| 6 | 3/4 Lockwasher |
| 7 | 3/4 Flatwasher |
| 8 | 2 pc 1/4 - 28 grease fitting |
| 9 | 2 pc 1/2 X 4 bolt |
| 10 | 2 pc 1/2 nut |
| 11 | 2 pc 1/2 lockwasher |
| 12 | 1/2 x 2 = 2 HDPE slider block |
| 13 | Slider Retainer |
| 14 | 1/4 x 1/2 Hex Socket Bolt |
| 15 | Cylinder support Block |
| 16 | Cylinder Clamp |

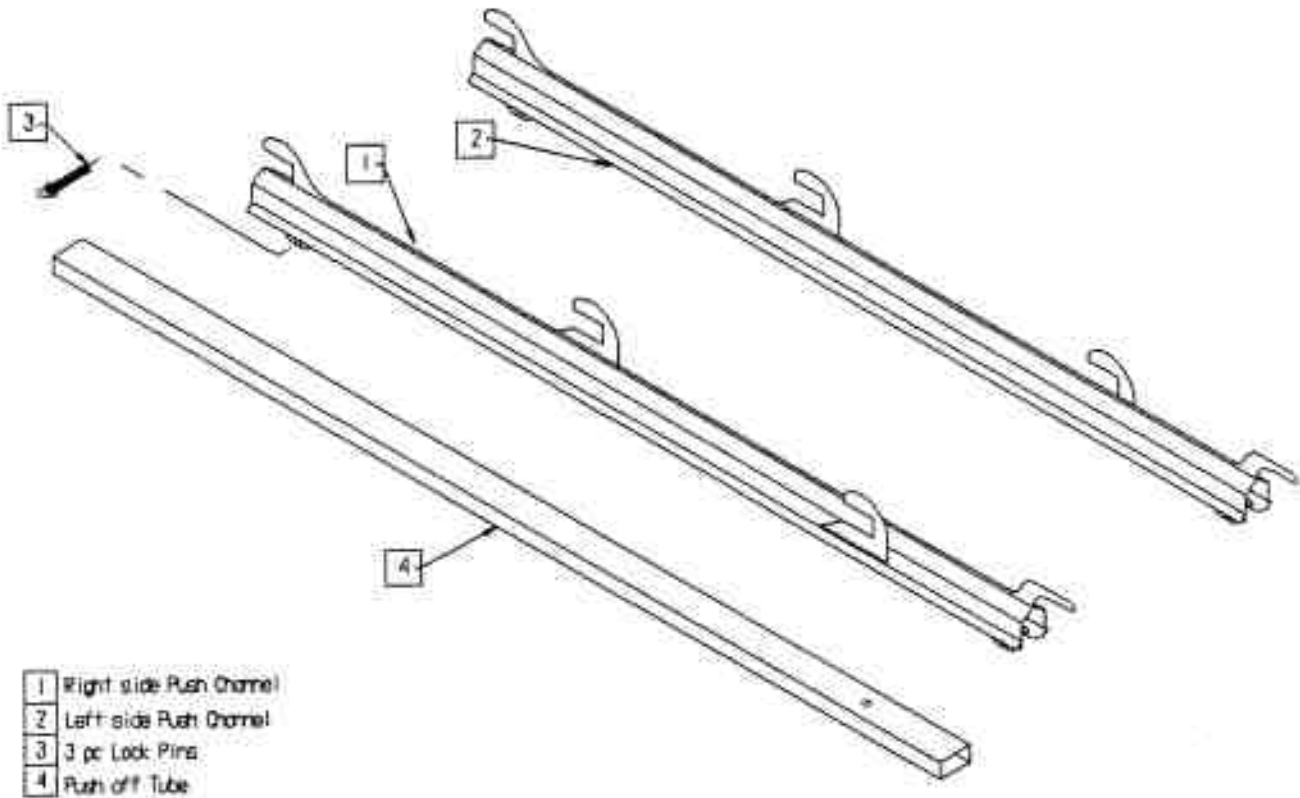
Tube - Line 5500
Push - Off



- | | |
|---|---------------------|
| 1 | Left Front Arm |
| 2 | Right Front Arm |
| 3 | Left Rear Arm |
| 4 | Right Rear Arm |
| 5 | Push Plate |
| 6 | 2 pc X Bar |
| 7 | 4 pc 3/4 x 5 Bolt |
| 8 | 4 pc 3/4 Locknut |
| 9 | 4 pc 3/16 Lynch Pin |

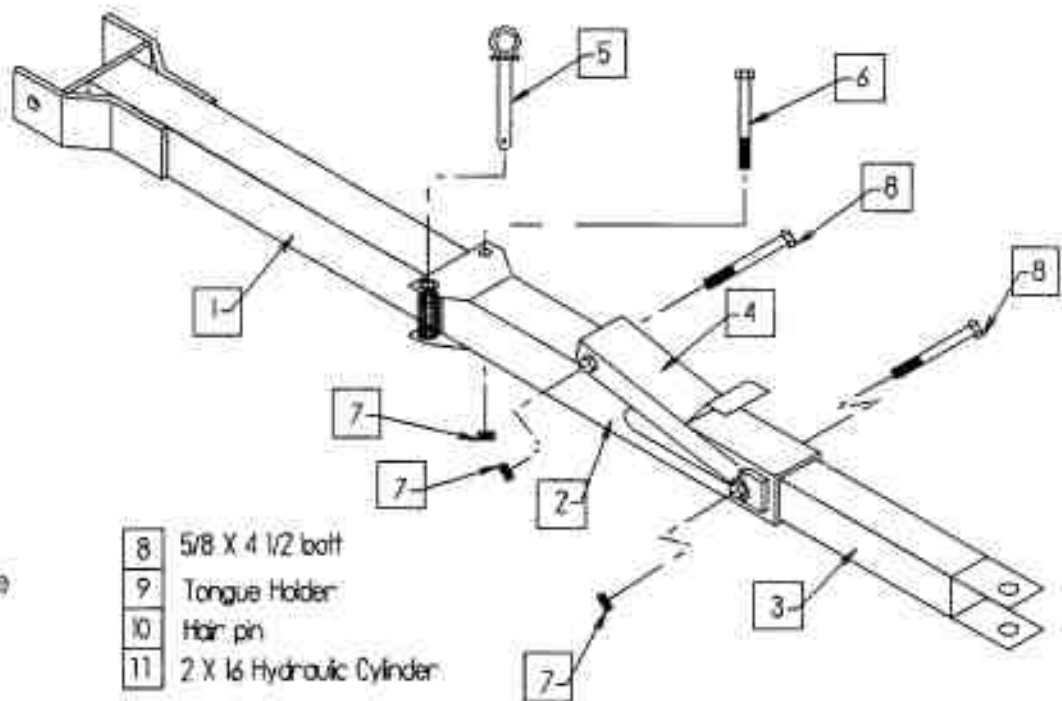
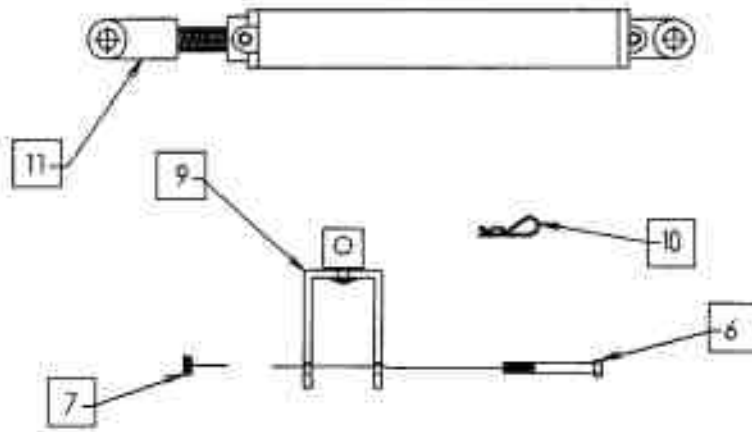
4

Tubeline 5500/6500
Push off Channel



- 1 Right side Push Channel
- 2 Left side Push Channel
- 3 3 pc Lock Pins
- 4 Push off Tube

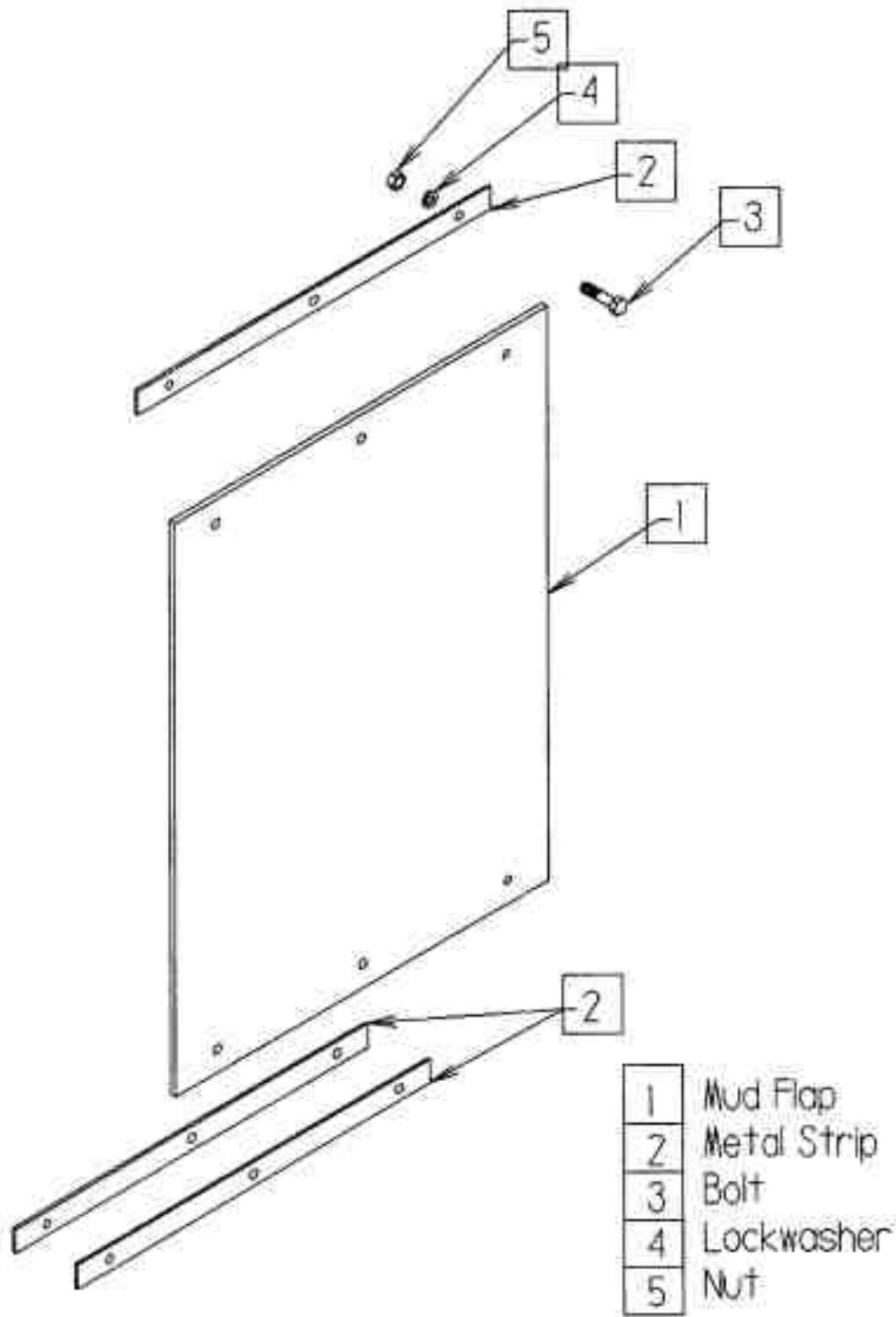
Tube-Line 550 Tongue



- | | |
|---|-----------------|
| 1 | Main tongue |
| 2 | Swinging tongue |
| 3 | Sliding tongue |
| 4 | Tongue latch |
| 5 | Tongue pin |
| 6 | 5/8 X 5 bolt |
| 7 | 5/8 locknut |

- | | |
|----|---------------------------|
| 8 | 5/8 X 4 1/2 bolt |
| 9 | Tongue holder |
| 10 | Hair pin |
| 11 | 2 X 16 Hydraulic Cylinder |

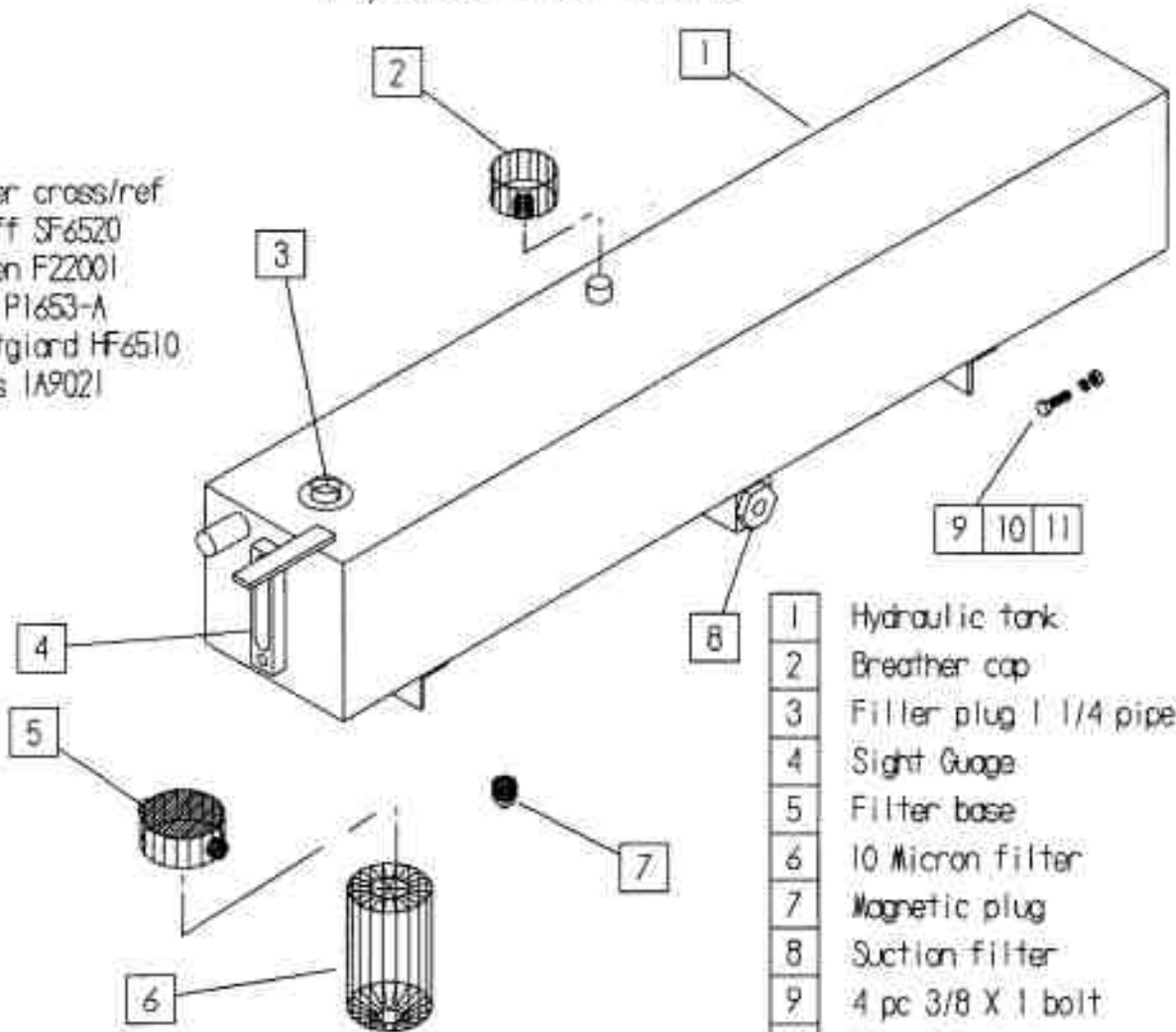
Tube-Line 5500/6500
Mud Flap



Tube-Line 5500/6500

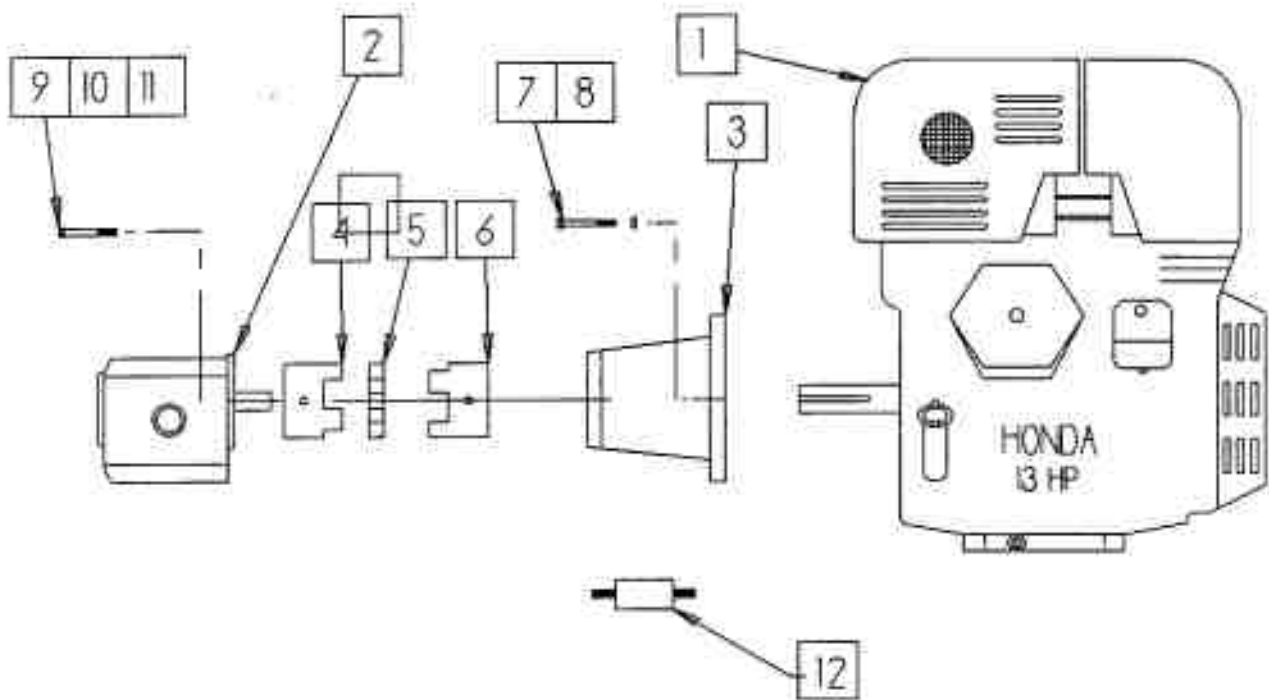
Hydraulic tank

Filter cross/ref
 Stauff SF6520
 Gresen F22001
 From P1653-A
 Fleetguard HF6510
 Cross 1A9021



- | | |
|----|------------------------|
| 1 | Hydraulic tank |
| 2 | Breather cap |
| 3 | Filler plug 1/4 pipe |
| 4 | Sight Gauge |
| 5 | Filter base |
| 6 | 10 Micron filter |
| 7 | Magnetic plug |
| 8 | Suction filter |
| 9 | 4 pc 3/8 X 1 bolt |
| 10 | 4 pc 3/8 lockwasher |
| 11 | 4 pc 3/8 nut |

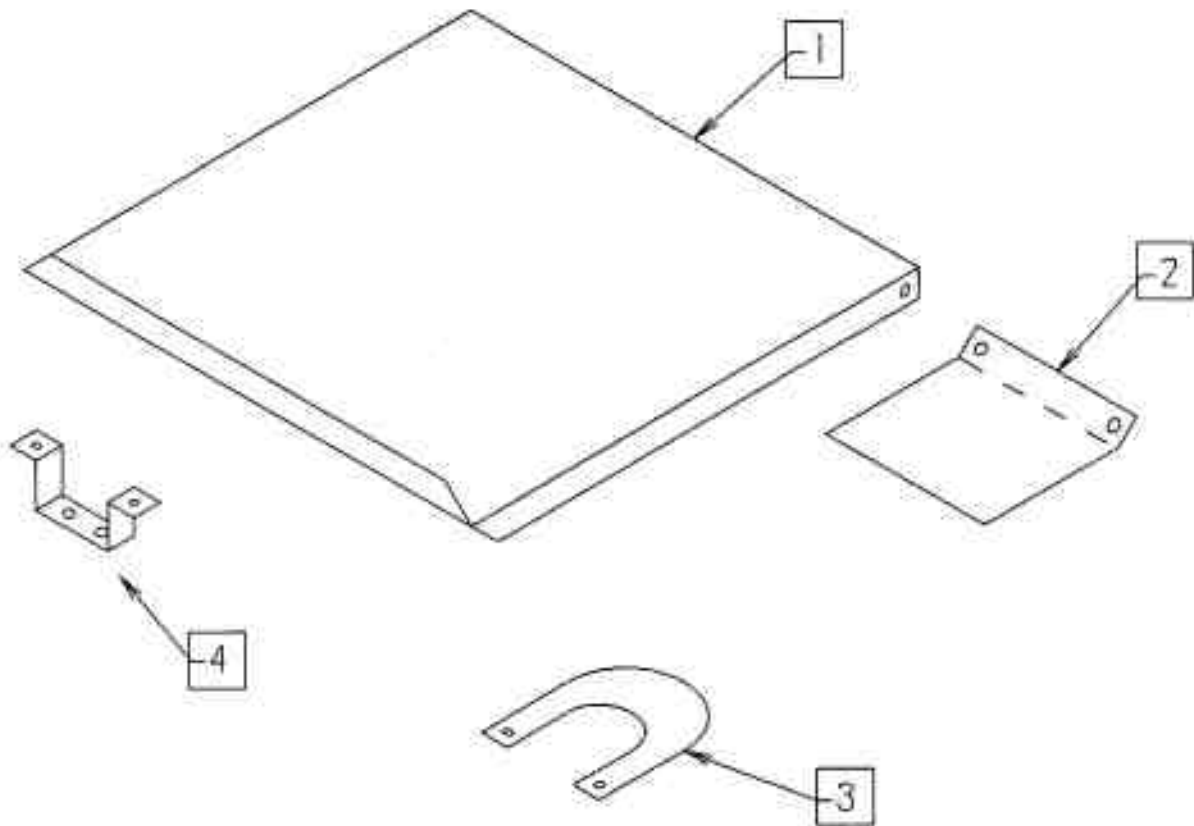
Tube-Line 5500/6500



1	13 Hp HONDA Engine
2	Hydraulic Pump
3	Engine to pump adaptor
4	Love Joy Coupling
5	Coupling spacer
6	Love Joy Coupling engine

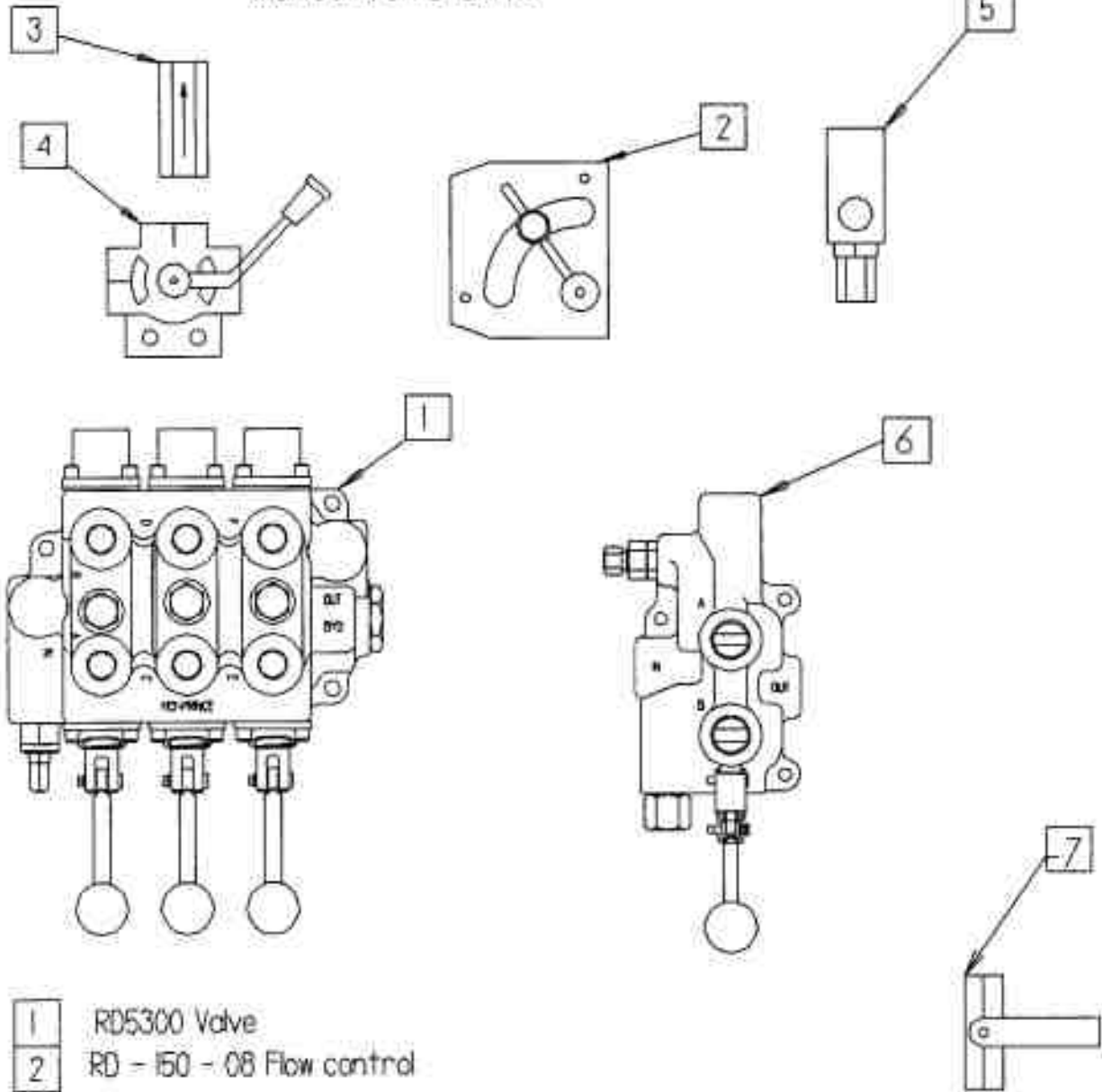
7	4 pc 3/8 X 1 bolt
8	4 pc 3/8 lockwasher
9	2 pc 3/8 1/4 bolt
10	2 pc 3/8 lockwasher
11	2 pc 3/8 flatwasher
12	Fuel Filter

Tube - Line 5500
Engine Cover & Decal Plate



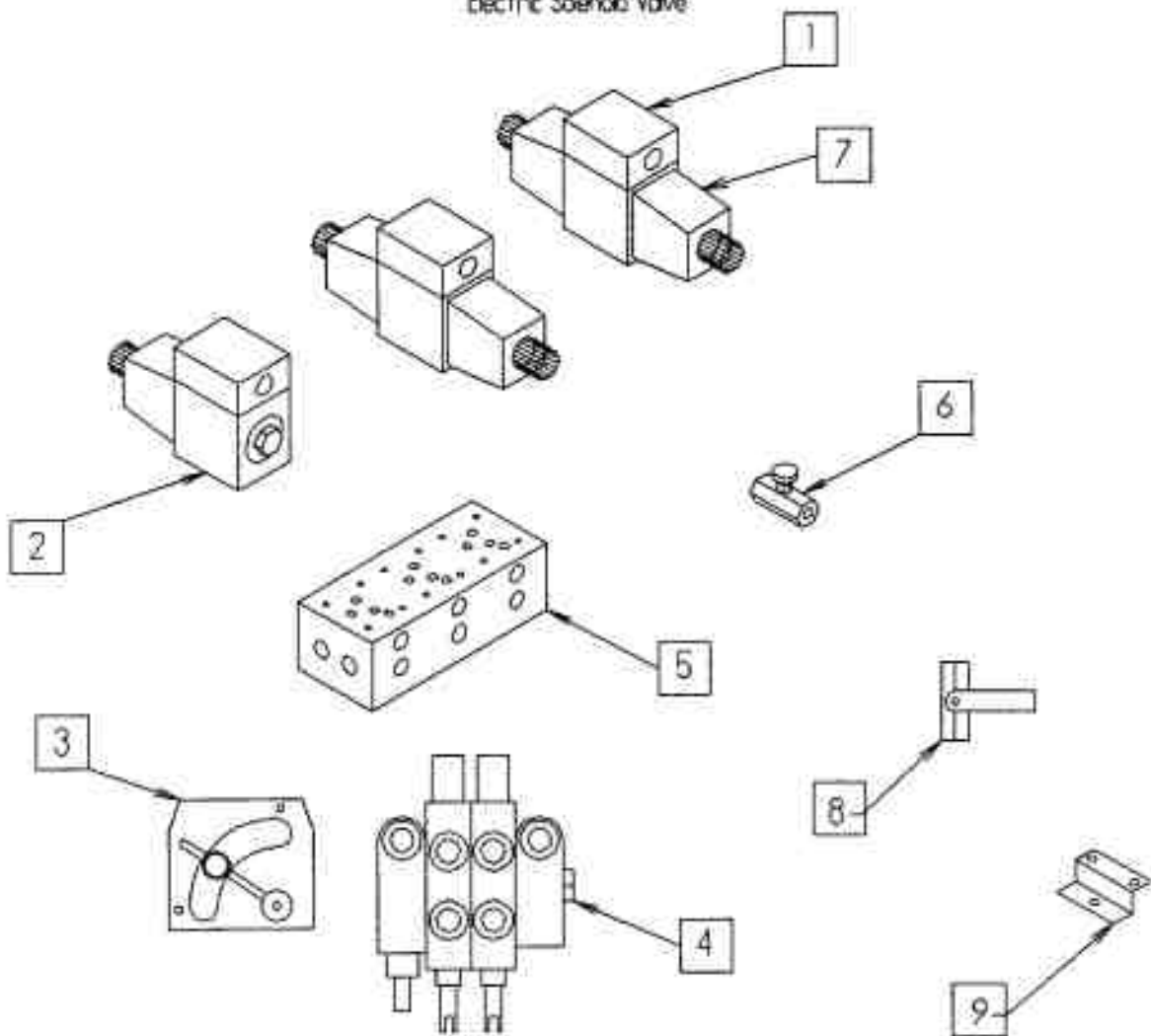
- | | |
|---|------------------------------------|
| 1 | Engine Cover |
| 2 | Valve Bank Decal Plate |
| 3 | Selector Valve Decal Plate |
| 4 | Selector Valve Decal Plate Bracket |

Tube-Line 5500
Manual valve bank



- | | |
|---|----------------------------|
| 1 | RD5300 Valve |
| 2 | RD - 150 - 08 Flow control |
| 3 | 1/2" Check valve |
| 4 | Selector Valve |
| 5 | Relief Valve |
| 6 | LS3010-1 |
| 7 | Ball Valve |

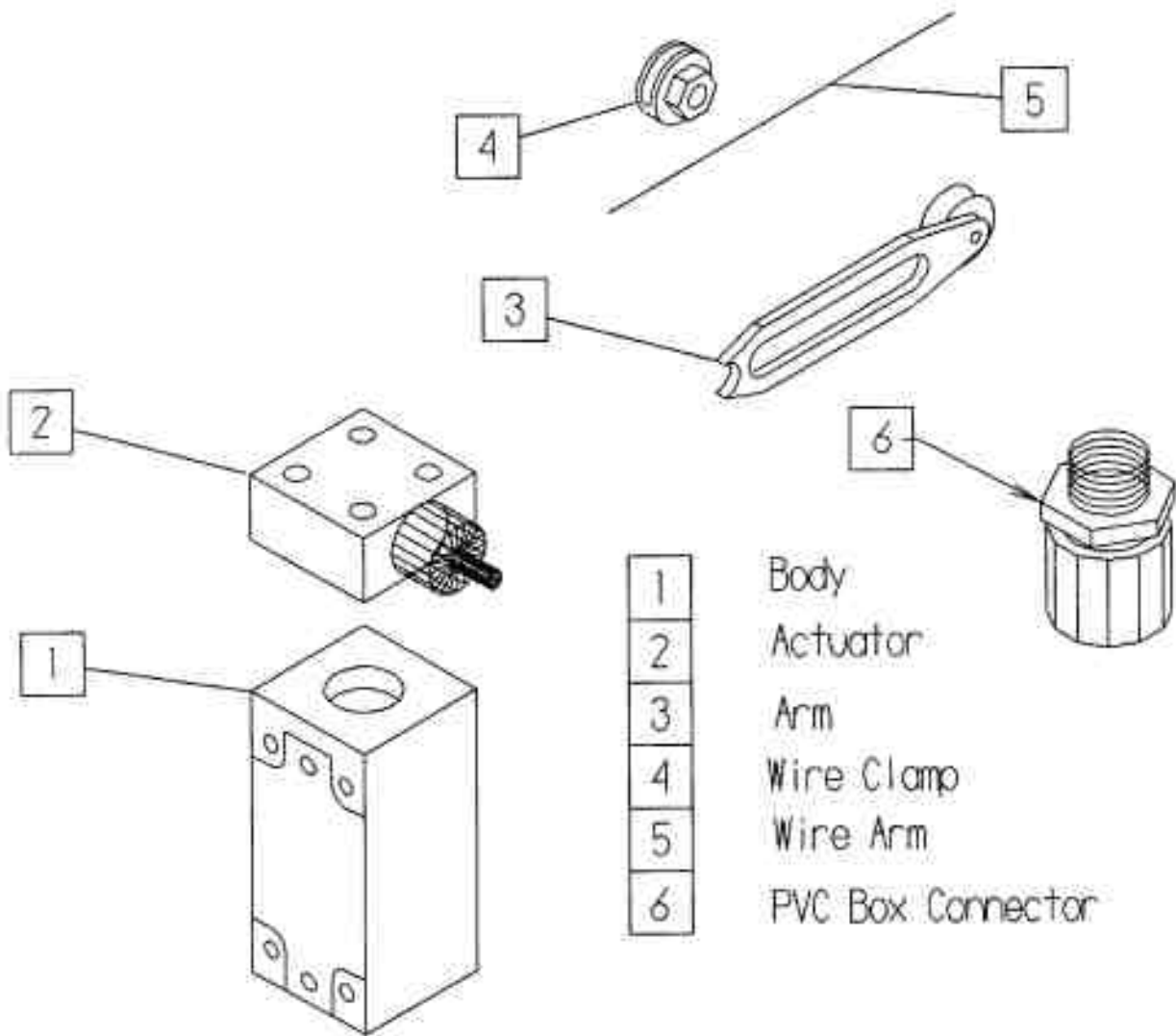
Tube-Line 500
Electric Solenoid Valve



- | | |
|---|--|
| 1 | 2 pc. VS2N3LOB/SL tandem center 12 vdc |
| 2 | VS2N1A0B/SL single sol 12 vdc |
| 3 | RD-150-06 Flow control |
| 4 | 7 spool manifold valve |
| 5 | 3 station manifold |
| 6 | Steering speed control valve |
| 7 | Valve Coil |
| 8 | Ball Valve |
| 9 | Manifold Mount |

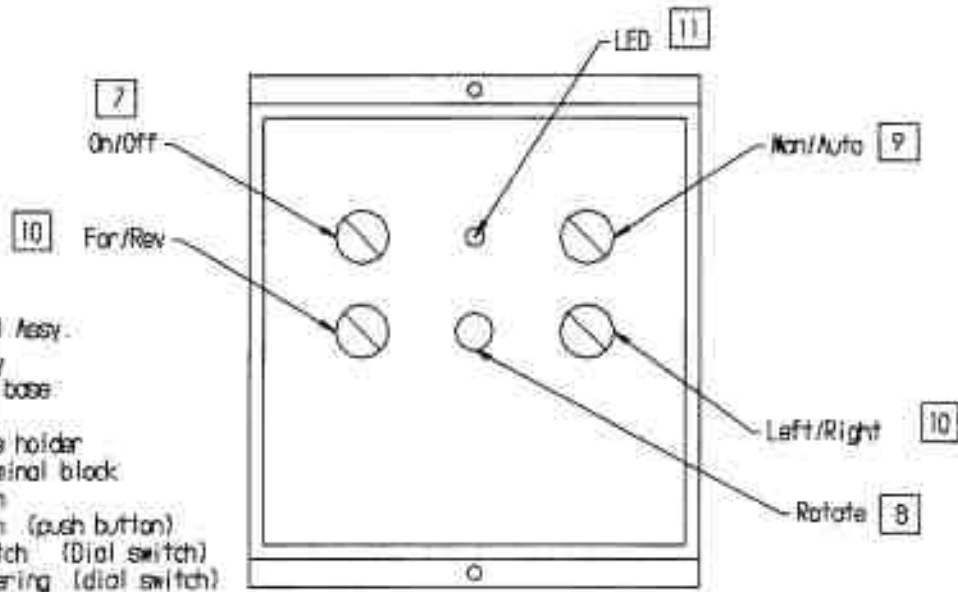
Tube-Line 5500

Limit Switch

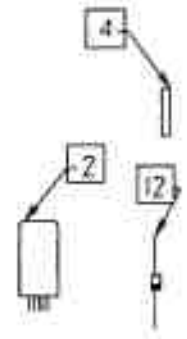
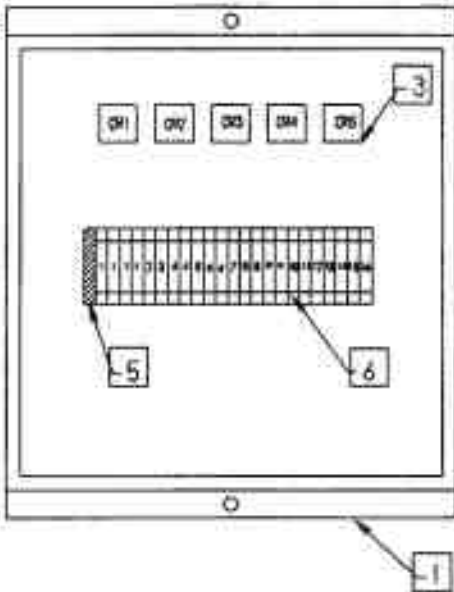
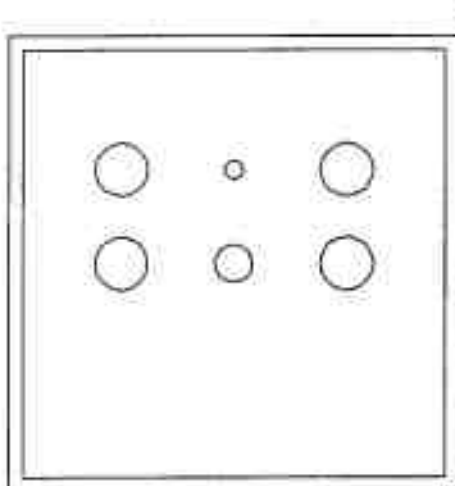


- | | |
|---|-------------------|
| 1 | Body |
| 2 | Actuator |
| 3 | Arm |
| 4 | Wire Clamp |
| 5 | Wire Arm |
| 6 | PVC Box Connector |

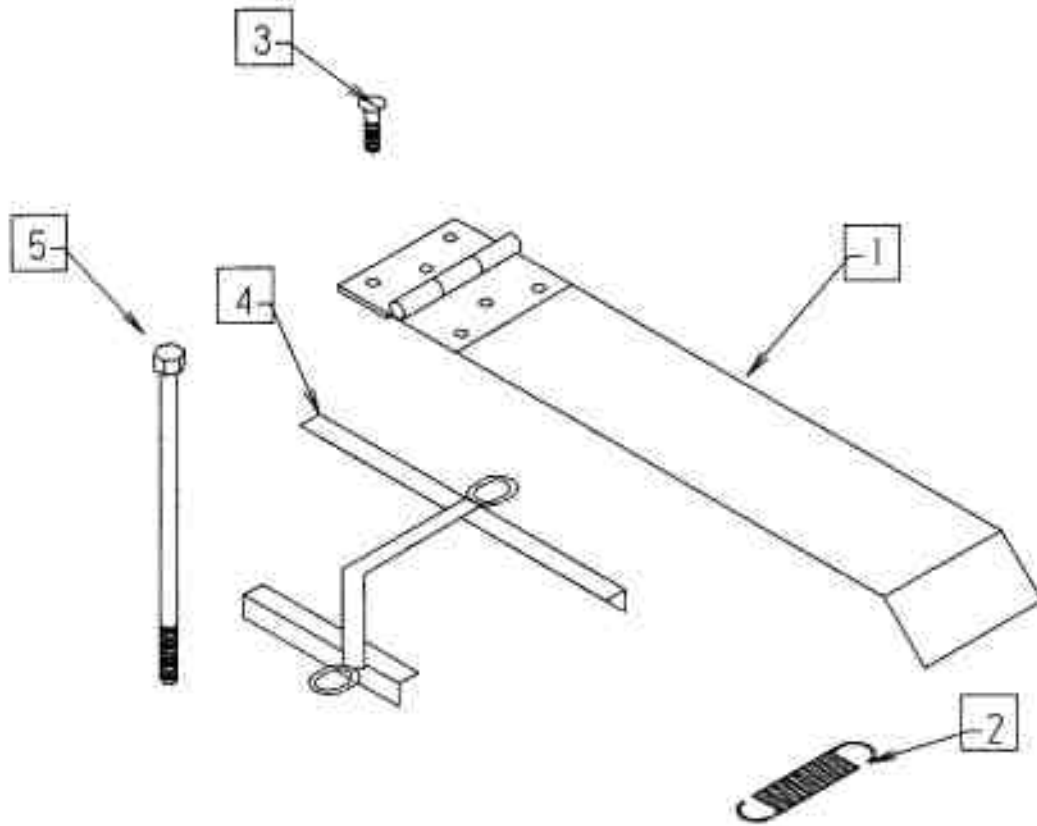
Tube-Line 5500
Control Panel



- 1 - Control Panel Assy.
- 2 - Control Relay
- 3 - 11 pin relay base
- 4 - 15 amp. fuse
- 5 - Din rail fuse holder
- 6 - Din rail terminal block
- 7 - On/Off Switch
- 8 - Rotate switch (push button)
- 9 - Man/Auto switch (Dial switch)
- 10 - Run and steering (dial switch)
- 11 - LED
- 12 - Diode

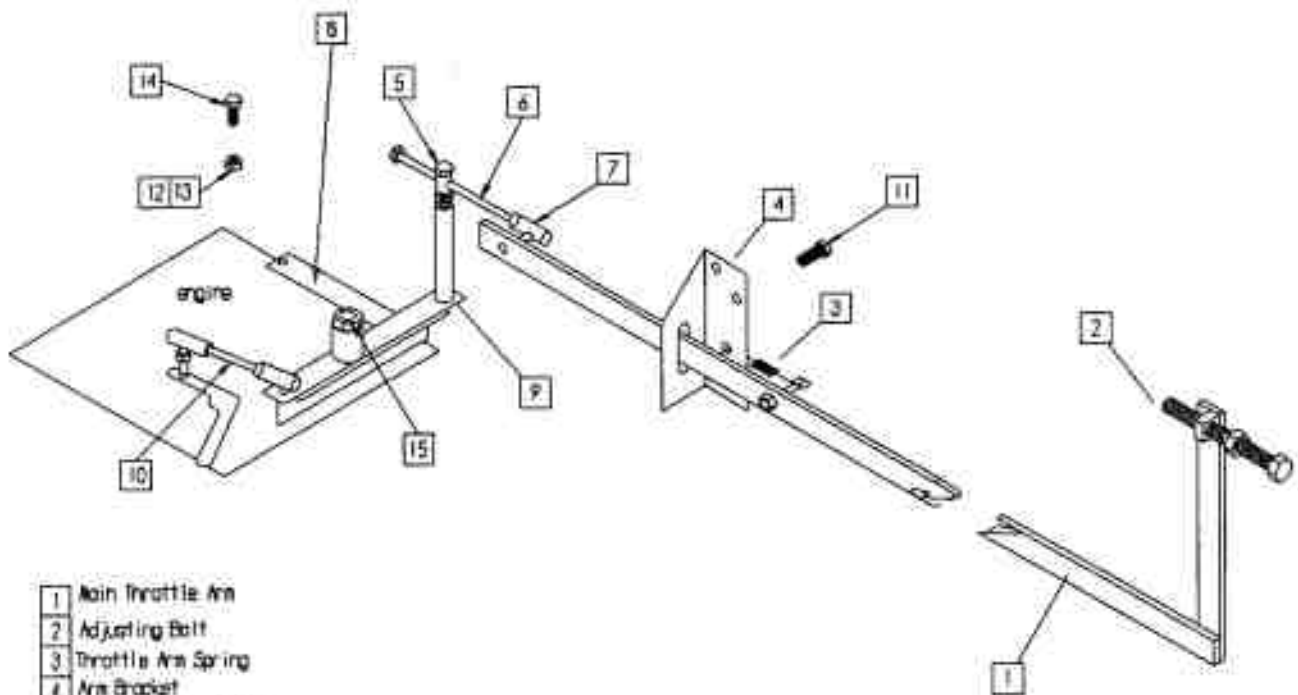


Tube - Line 5500
Trigger & Battery Holddown



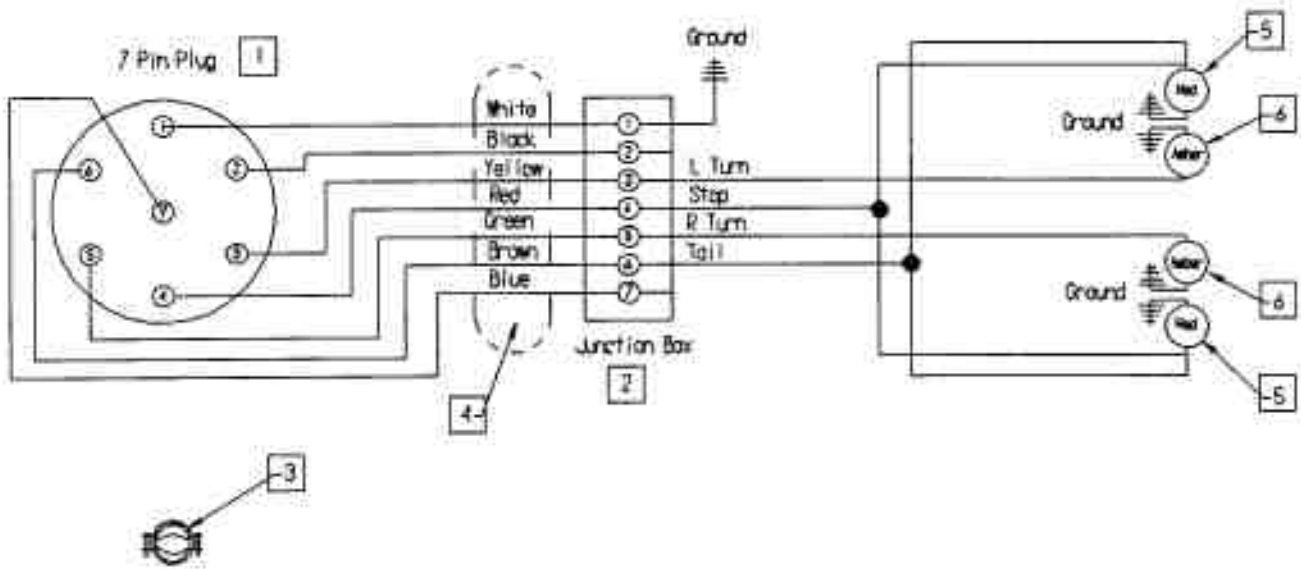
- | | |
|---|--|
| 1 | Trigger Plate |
| 2 | Trigger Spring |
| 3 | 2 pc 1/4 x 1 Stove Bolt / Nut & Lockwasher |
| 4 | Battery Holddown |
| 5 | 2 pc 5/16 x 7 Carriage Bolt / Nut / Lockwasher |

Tubeline 599
Throttle Bracket



- | | |
|----|-------------------------------------|
| 1 | Main Throttle Arm |
| 2 | Adjusting Bolt |
| 3 | Throttle Arm Spring |
| 4 | Arm Bracket |
| 5 | Throttle Linkage Pivot |
| 6 | 1/4 x 5 UNF Bolt |
| 7 | Throttle Ball Joint |
| 8 | Engine Bracket |
| 9 | Racker Bar |
| 10 | 1/4 x 4 UNF Threaded Rod c/w 2 nuts |
| 11 | 6 pc 5/16 x 1 Bolt |
| 12 | 9 pc 5/16 Nuts |
| 13 | 9 pc 5/16 Lockwasher |
| 14 | 3 pc 5/16 x 1 1/2 Bolt |
| 15 | 1/2 Locknut |

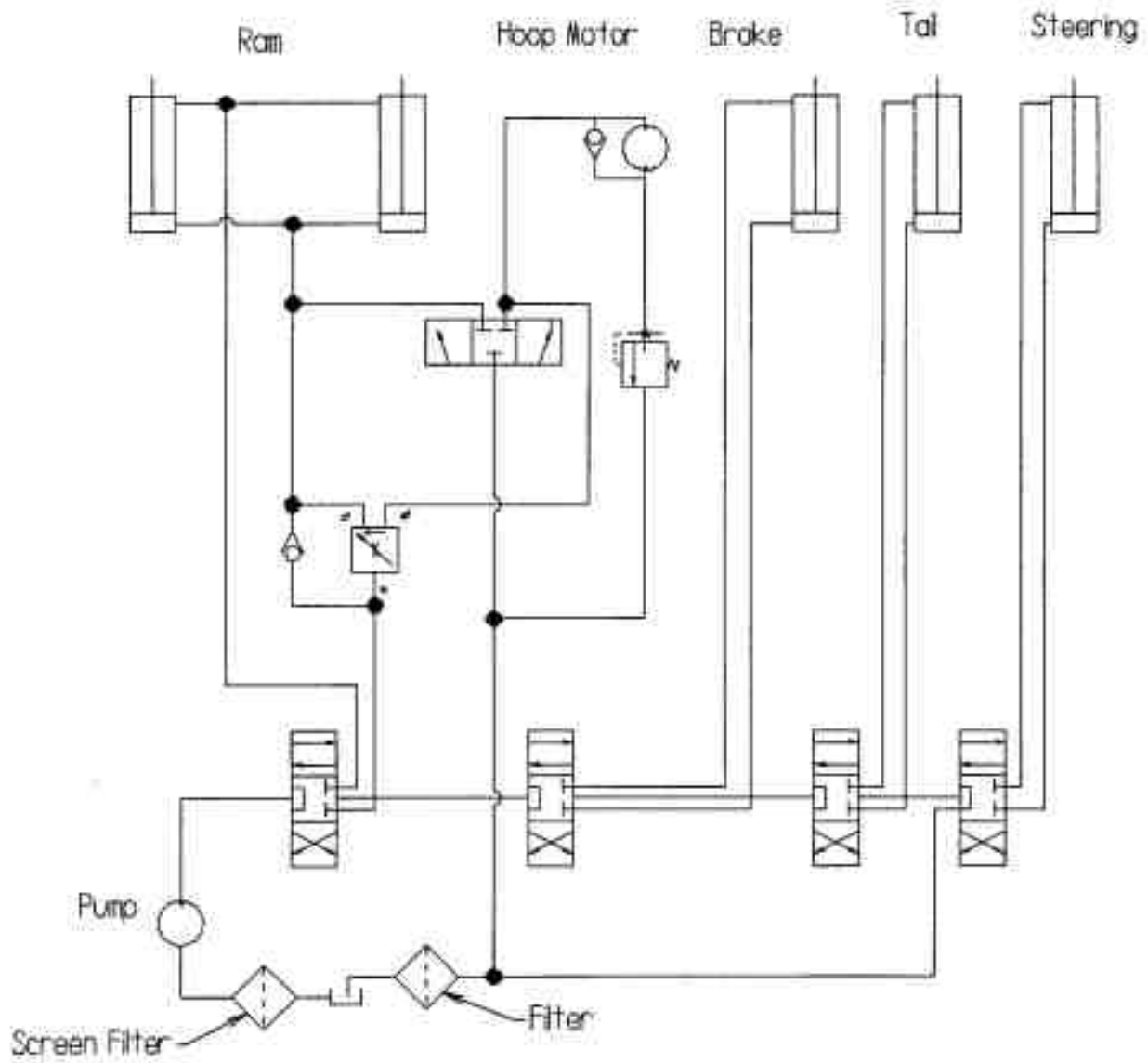
Tube-Line 5500
Running Lights



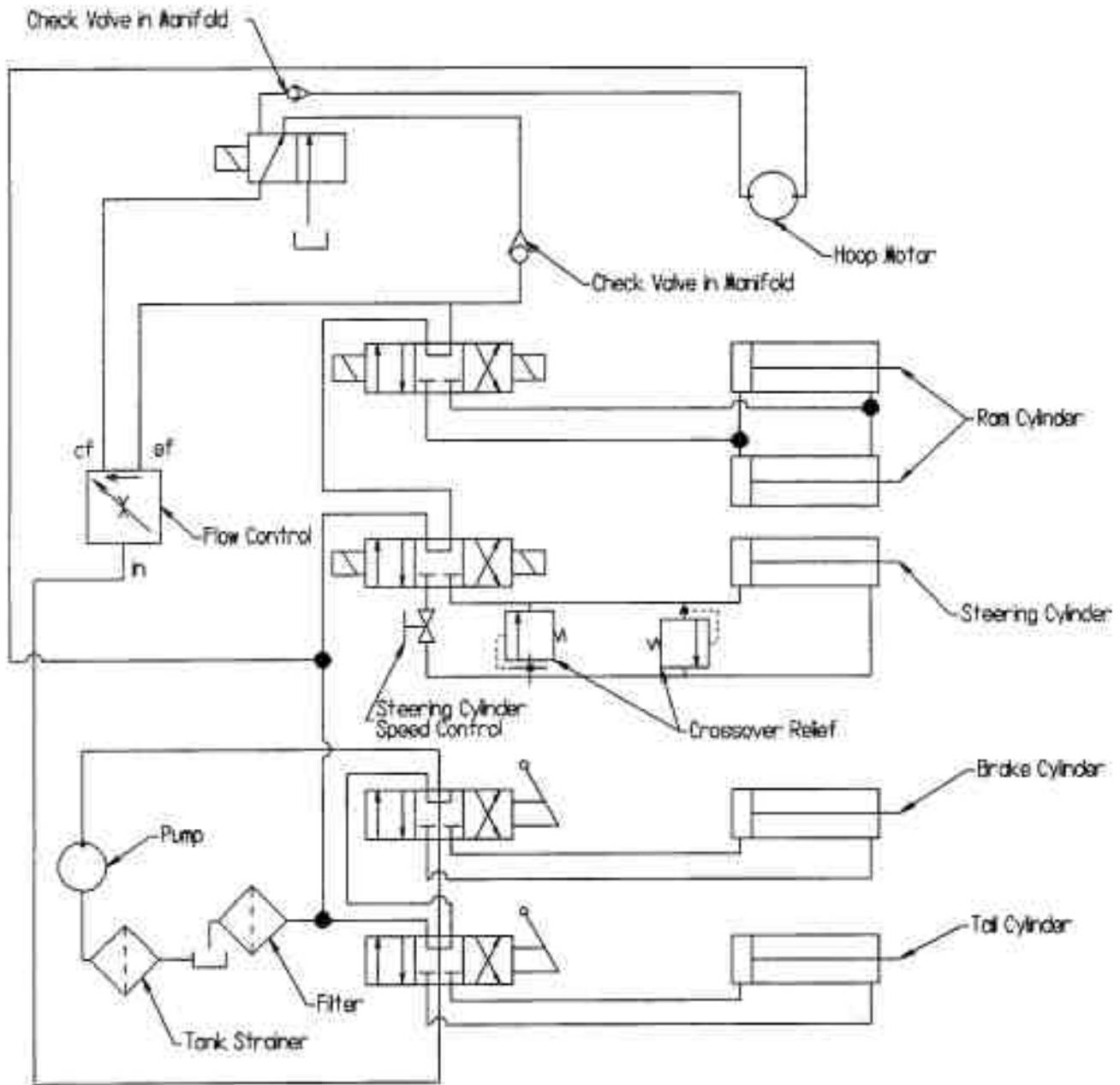
- | | |
|---|------------------|
| 1 | 7 Pin Plug |
| 2 | Junction Box |
| 3 | Strain Relief |
| 4 | 7 Wire Conductor |
| 5 | Red Lamp |
| 6 | Amber Lamp |

Tube-Line 5500

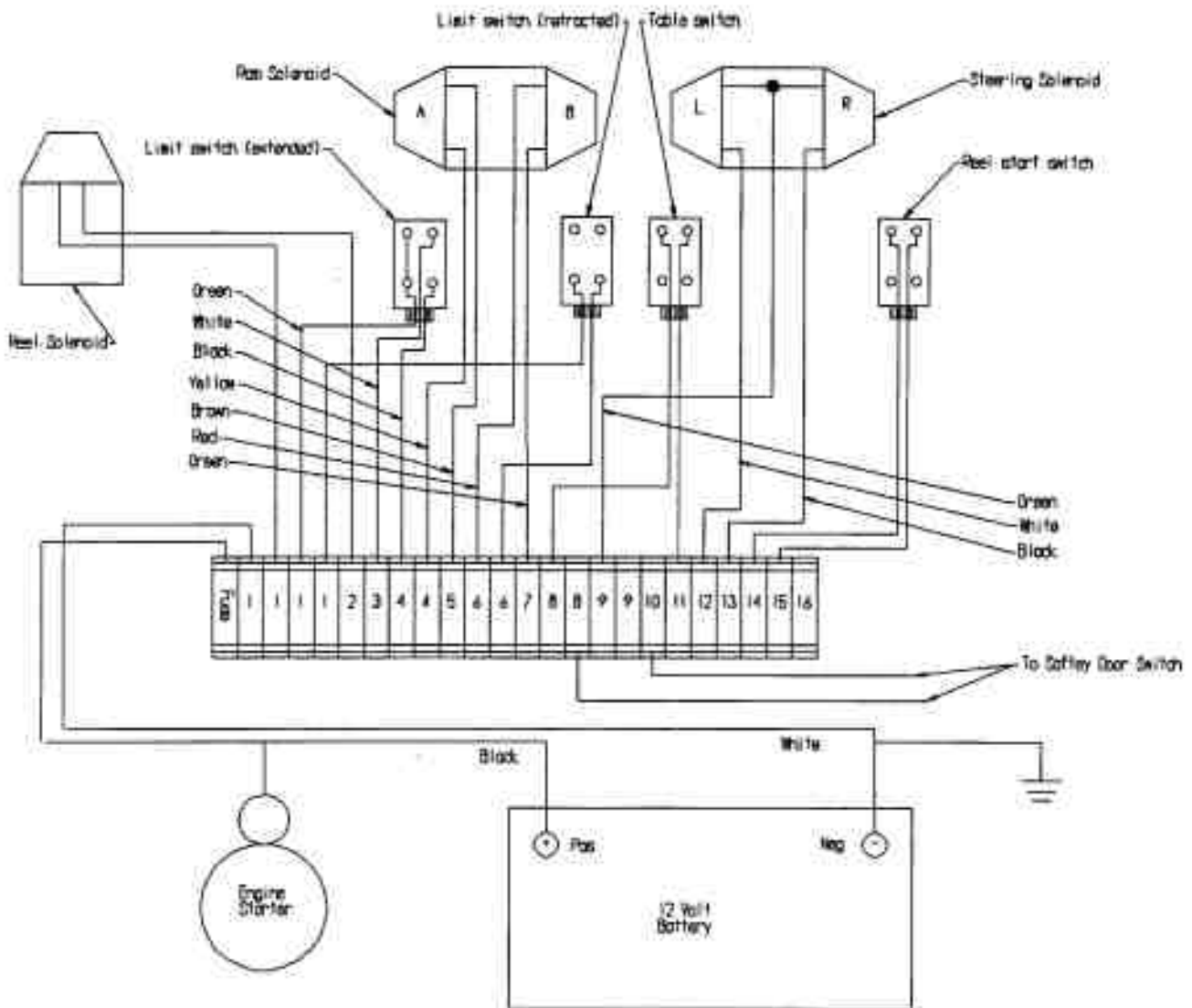
Manual Hydraulic Schematic



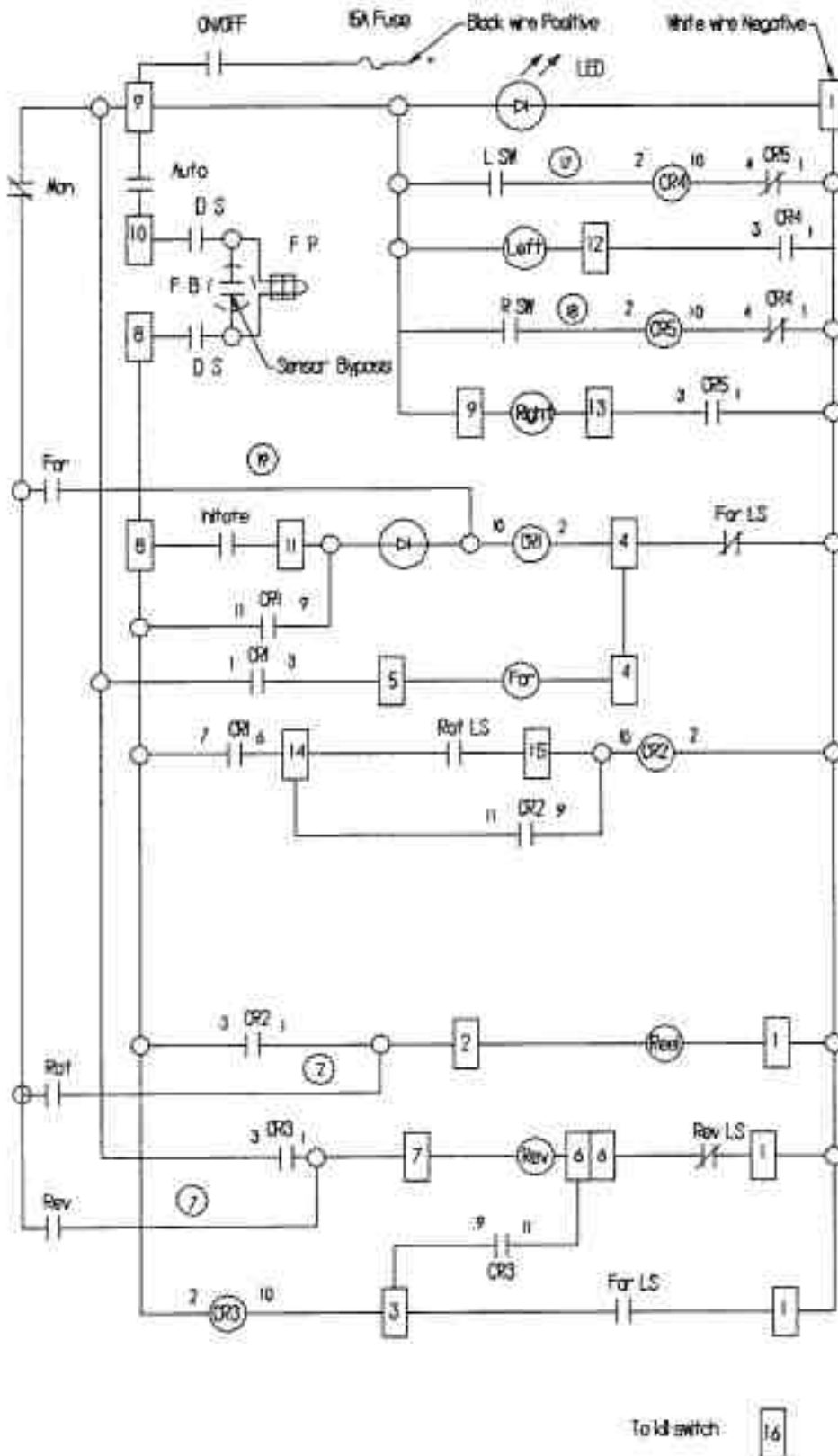
Tubeline 5500 Electric Hydraulic Schematic



Tubeline 599 Electric Wiring Diagram



Tube-Line 899
Electric Control Panel Schematic



- Fuse block pos-12 VDC
- #1 Neg 24DC
- #1 reel solenoid
- #2 reel solenoid
- #3 Forward L/S Con
- #3 Forward L/S NO
- #4 Forward L/S NC
- #4 Forward Solenoid
- #5 Forward solenoid
- #6 Reverse L/S NC
- #6 Reverse L/S NO
- #6 Reverse solenoid
- #7 Reverse solenoid
- #8 Film sensor L/S
- #8 Film sensor L/S
- #8 Start (trigger) L/S
- #8 Start (trigger) L/S
- #9 Steering Solenoid Con
- #12 Steering solenoid Left
- #13 Steering solenoid Right
- #14 Rotation L/S NO
- #15 Rotation L/S
- #16 KI switch
- #10 D.S. Door Switch
- F.P. Film sensor plug
- Accessory F.B.I.M. Sensor-bypass Toggle Switch

Tube-Line 5500

Manual Hydraulic Sequence of Operation

- 1 With valves in neutral position, engine running hydraulic fluid is pumped through valve bank and returned to reservoir.
- 2 Brakes, tail and steering are standard hydraulic cylinder operation.
- 3 Wrap cycle – push wrap valve in, detent will hold valve in position, fluid flows from valve through flowcontrol and is split into 2 circuits, one circuit will go to ram cylinders and the other will go to hydraulic motor. These circuits are proportioned with the lever on flowcontrol valve. With the selector valve handle in “Both” position flow will go to cylinder and motor. By changing flowcontrol handle, the cylinders will speed up or slow down accordingly. At the same time motor will change speed inversely to cylinder ie. when cylinder slows down motor will speed up.
- 4 Selector valve is used to bleed either cylinder or motor flow back to tank, or block both circuits causing both cylinder and motor to operate. ie. With handle in wrap only position the fluid that would normally go to the cylinder will flow back to tank. With handle in ram only position motor fluid will go to tank.
- 5 Wrap cycle – pull wrap valve out, detent will hold valve in position, fluid will flow from valve port causing cylinder to retract. Fluid from other end of cylinder will return through check valve, at flowcontrol back through valve stack and to tank.
- 6 Check valve at motor lets motor freewheel in one direction without cavitating. Relief valve at motor return acts as a restrictor valve to keep motor from turning when ram cylinder is retracting.

Tube-Line 5500

Electric Hydraulic Sequence of operation

- 1 With valves in neutral position, control panel on/off switch in off position, engine running fluid is pumped through valve stack and returned to reservoir.
- 2 Brakes and tail are standard hydraulic cylinder operation.
- 3 Wrap cycle fluid flows from power beyond port on 2 spool valve to flowcontrol, and is split into 2 circuits one circuit goes to double solenoid valve for ram cylinder, the other circuit goes to single solenoid valve for hydraulic motor. By moving flowcontrol handle more or less fluid will flow to cylinder or motor ie. as more fluid flows to cylinder less fluid will flow to motor and vise-versa.
- 4 Electric control panel- "Man-Auto" switch turned to "Man". Turn "On/Off" switch to On, then red LED will light up indicating 12V power is at control circuits, with engine running. Turn "Forward" switch in to energize solenoid A on double solenoid valve. Ram cylinder will extend. Turn "Reverse" switch to energize solenoid B on same valve. Ram cylinder will retract. Push Rotate button in and hydraulic motor will turn. "For/Rev and Push" buttons have to be held to operate, by releasing them action will stop. Engine throttle has linkage to slow engine down when ram is all the way to the front. Spring on linkage will speed engine up as soon as Ram cylinder starts to extend.
- 5 When "Man/Auto" switch is turned to Auto, "For/Rev and Rotate" switches no longer function. Depress trigger switch located on bale table, Ram hydraulic valve is energized. The ram cylinder will extend and engine will speed up. When ram extends to front slider switch, this switch will energize the single solenoid valve and turning the wrap motor. When ram is extended to the limit switch at the end of stroke, single solenoid valve and double solenoid valve "A" will turn off. Solenoid B will energize causing ram cylinder to retract until it trips limit switch at the front end of bale table, solenoid "B" will turn off, the ram cylinder will stop and engine will idle down.
- 6 Steering is done by steering switch, right/left activating steering double solenoid valve A or B. This valve will work in either manual or automatic mode.

TUBE-LINE 5500

Page #	Ref #	Part #	Qty	Description
1	1	550-100-001	1	Hoop Outer Ring
1	2	550-100-002	1	Hoop Inner Ring
1	3	550-200-116	2	Mounting Bolt 5/8 x 2
1	4	599-100-004	2	5/8 Nut
1	5	599-100-005	2	5/8 Lockwasher
1	6	599-100-003	2	Mounting Bolt 5/8 x 3 1/2
2	1	500-200-014	8	4" Wheel
2	2	500-100-015	8	Axe Bolt \ Locknut
2	3	550-200-016	8	Spanner
3	1	550-100-089	2	Main Wrap Bracket
3	1A	550-200-090	2	Main Wrap Side Insert
3	2	550-100-005	4	1-14 UNF Castellated nut
3	3	550-100-006	4	Tensioner Roller
3	4	550-100-007	8	3/4 Flange Bearing
3	5	550-100-008	2	Small Gear
3	6	550-100-009	2	Large Gear
3	7	550-100-010	2	Gear Cover
3	8	550-200-115	2	Spool Holder
3	9	550-200-012	4	Wrap Spool
3	10	550-100-013	8	Washer
3	11	550-100-014	4	Locknut
3	13	500-100-022	2	Plastic Pipe
3	14	500-100-021	4	Plastic Bearing
3	15	550-100-016	4	Bracket
3	16	550-100-017	4	Spacer
3	17	500-100-135	4	Spring
3	18	550-100-018	2	Axe Plastic Roller
3	19	550-100-003	2	1/2 x 2 Bolt c/w Locknut
3	20	550-100-019	16	5/16 Carriage Bolt
3	21	550-100-020	4	3/16 Keystock
3	22	550-100-021	2	Grease Filling
3	23	599-100-006	4	10-24 x 3/4 Machine Bolt
3	24	550-200-100	8	3/8 x 1 #5 bolt
3	25	550-200-101	8	3/8 locknut
3	26	550-200-102	2	3/8 x 2 1/2 bolt
3	27	550-200-103	2	latch
3	28	550-200-104	2	3/16 lynch pin
4	1	599-100-100	1	Right Hoop Brace
4	2	599-100-101	1	Left Hoop Brace
4	3	599-100-102	1	Right Hoop Post
4	4	599-100-103	1	Left Hoop Post
4	5	599-100-104	2	Switch Adjuster Screw
4	6	599-100-105	1	Automatic Control Panel Mount
4	7	599-100-106	1	Manual Control Mount
4	8	599-100-110	4	1/2 x 4 1/2 Bolt

