

REMOTE **TRAX II**

LAYTON



CUMMINS DIESEL

65 HORSEPOWER

Warranty

Limited Warranty and Limitations of Liability

Warranty

Layton Manufacturing Company warrants its products to its dealer, the dealer is to extend the same warranty to its customers as follows:

All products sold hereunder are warranted by Layton Manufacturing Company against defects in material or workmanship for twelve (12) months from the delivery date thereof to the customer. The liability of Layton Manufacturing Company being expressly limited to repairing or replacing (at Layton Manufacturing Company's Option) all defective machine parts accessories, or subassemblies, as shall be returned to Layton Manufacturing Company of Salem, Oregon, or other such point designated by Layton Manufacturing Company, freight prepaid, within a reasonable time. No other warranty or guarantee, express or implied, is authorized or shall apply to the same.

Liability

1. This warranty is expressly limited to parts replacement and repair, and is not transferable. Any expressed warranty not herein provided, and any remedy for breach of contract is excluded and disclaimed. The implied warranties of merchantability and of fitness for any particular purpose are limited to one year from delivery to the original user, or 12 months from factory invoice, whichever ever occurs first.
2. Any component or part manufactured by others will carry that manufacturer's warranty, and in no case will Layton Manufacturing Company be liable, either expressed or implied, for warranties in excess of those made by the original manufacturer.

3. Under no circumstances will Layton Manufacturing Company be liable to the purchaser, or any other person, for any incidental or consequential damages. The user assumes liability for all personal injury or property damage resulting from the handling, possession, or use of the product.
4. Repairs or modifications done by others, or parts supplied by others outside the company's factory are not covered by this warranty
5. No agent, employee, or representative of Layton Manufacturing Company has any authority to make any affirmation, representation, or warranty concerning Layton Manufacturing Company, except as specifically stated above.

Warranty Procedure

1. Prior authorization by Layton Manufacturing Company must be obtained for all warranty work.
2. Contact Layton Manufacturing Company giving complete details of your request, the unit involved, including serial number, date of purchase, and the nature or reason for the claim.
3. A Warranty Request Number will be assigned, and is required, whenever any warranty is to be paid either in the form of cash, credit, replacement parts, or service work.
4. The assignment of a Warranty Request Number does not guarantee warranty will be allowed. The number is to identify the request and the part to be returned.
5. When parts are shipped on Warranty Request, you may be required to return old parts for inspection or return to the original manufacturer. In this case you will be invoiced for shipment of new components until the old unit is returned.

Safety

SAFETY SUMMARY **INTRODUCTION**

Summarized in subsequent paragraphs is general safety information that supplements specific warnings and cautions appearing elsewhere in this manual. Since all electrical and hyromechanical equipment is dangerous whenever incorrectly operated, you must thoroughly understand this safety summary before attempting to operate or service this tractor. The following terms define the various precautions in this manual.

WARNING

A "WARNING" HIGHLIGHTS PROCEDURES OF PRACTICES THAT IF NOT STRICTLY FOLLOWED, COULD RESULT IN SERIOUS INJURY OR DEATH. WHENEVER YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE WHICH FOLLOWS TO PREVENT SERIOUS INJURY OR DEATH.



CAUTION

A "CAUTION" HIGHLIGHTS PROCEDURES OR PRACTICES THAT IF NOT FOLLOWED, COULD RESULT IN DAMAGE TO PROPERTY. WHEN YOU SEE THIS SYMBOL, READ THE MESSAGE WHICH FOLLOWS TO PREVENT PROPERTY DAMAGE.

NOTE:

A "note" highlights procedures or practices which are essential, but are not of known hazardous nature. Carefully read notes in order to improve equipment reliability and/or personal performance.

NOTE: All possible safety hazards cannot be foreseen so as to be included in this manual. Therefore, the operator must always be alert to possible hazards that could endanger personnel and/or damage to the equipment.

SAFETY NOTICES

Where possible, safety decals & placards are installed on the tractor and assembled components at the factory.

SAFETY PRECAUTIONS

The Remote Trax TC30-2 produced by Layton Manufacturing Company may be used in varied situations. With *safety* as a primary concern, these precautions are provided to help avoid mistakes, hazards, and potential accidents.

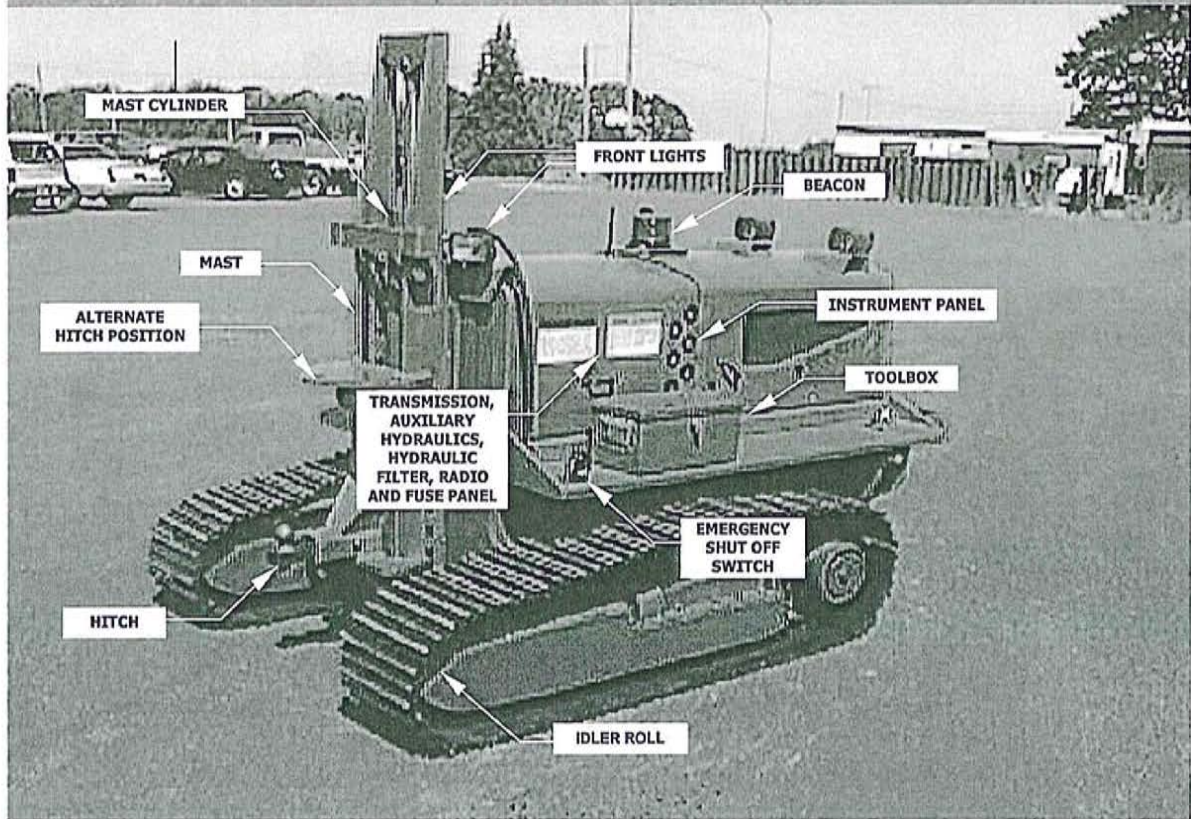
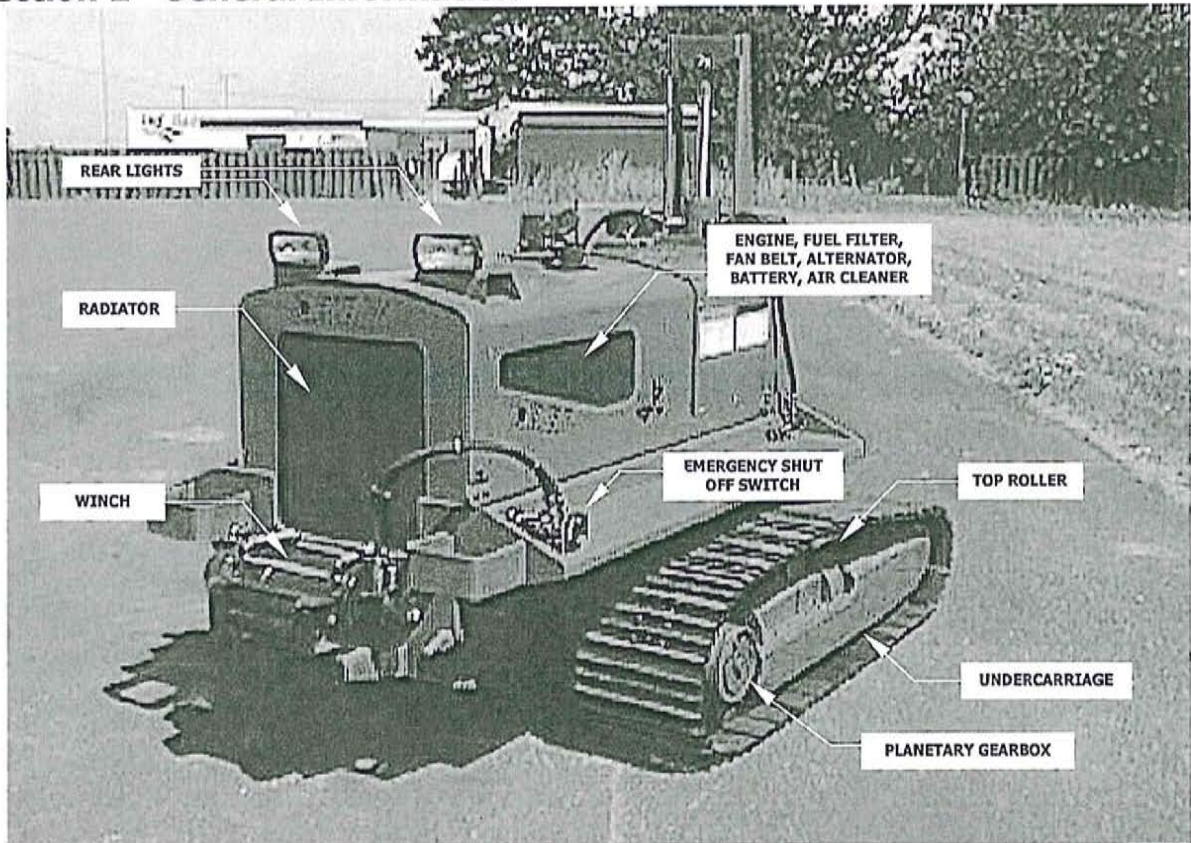
1. The Remote Trax TC30-2 should be maintained and used properly as the basis of a safe work environment.
2. Keep the operation-service-parts manual available at all times.

WARNING

DO NOT LET ANYONE OPERATE THIS EQUIPMENT WITHOUT PROPER INSTRUCTION

3. Any potential operator should be fully capable of accomplishing the task and activities to safely operate the Remote Trax TC30-2.
4. Before operating this equipment, every operator must read and understand this manual and the safety signs, warnings and instructions contained therein. Should any difficulty such as unfamiliar language be encountered, the owner must obtain translation of these instructions prior to allowing the person to operate the Remote Trax TC30-2.
5. Anyone who installs, services or repairs this equipment must be properly instructed and warned prior to beginning work. Each individual must read and understand all safety signs, cautions, and warnings prior to maintenance or operation.
6. Any modifications to the Remote Trax TC30-2 and related components may impair the function and/or safety of the component or system.

Section 1 General Information



General Information

1.1 INTRODUCTION

This manual was prepared for the Layton Remote Trax TC30-2 remote controlled tractor, and includes the following information:

Section 1, General Information describing the tractor and its specifications.

Section 2, Operation Instructions are given to promote safe and efficient use of the tractor.

Section 3, Service guidelines for preventative maintenance, and troubleshooting the tractor.

Section 4, Parts information for tractor component repair or replacement.

NOTE: Carefully read the safety summary which precedes this section before attempting to operate or service this equipment.

1.2 DESCRIPTION

The Remote Trax TC30-2 is a fully remote controlled tractor with a four-cylinder 50 horsepower diesel engine. The independent track hydrostatic propulsion system has five sealed, lubricated track rollers per side with bolt on drive sprockets.

Current options include 17-5/8" single grosser pads, and a 66" six way dossier blade. Contact your dealer for information on other options or requirements.

NOTE: The description and specifications shown in this manual were in effect at the time of publication, and are subject to change without notice or obligation.

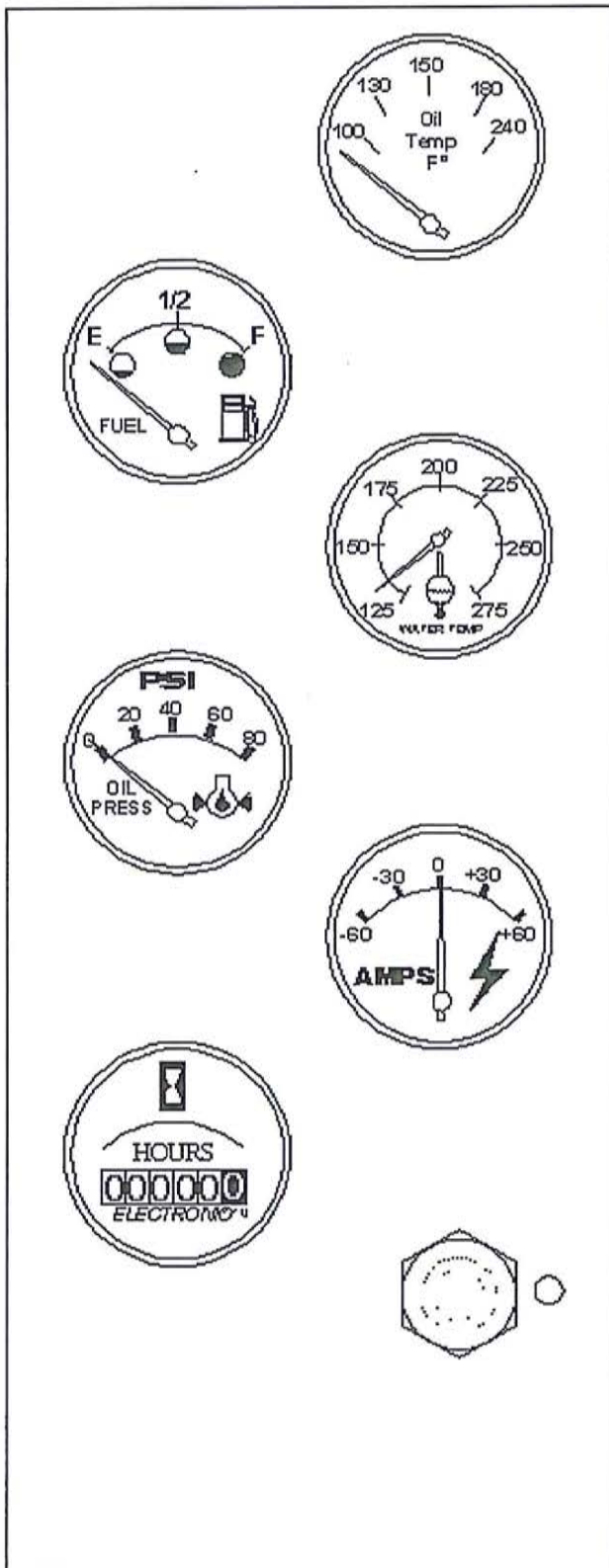
1.3 SPECIFICATIONS

Model.....	T30-2
Overall Length.....	8'9"
Overall Width.....	5'3"
Overall Height.....	6'10"
Ground Clearance.....	7"
Track-Shoe Width.....	14" or 18"
Gross Weight.....	6000 lbs
Winch Capacity.....	12,000 lbs
Fuel.....	15 gal. diesel
Power.....	50hp 4cyl.
Engine Oil.....	5.4 qt. 15W40
Engine Coolant.....	Ethylene glycol & water
Hydraulic Reservoir.....	19 gal. ISO68*
Operating Pressure.....	1,800 psi

***NOTE:** Hydraulic fluid that conforms to ISO32 specification is recommended for arctic (extreme cold weather) operation.

1.4 RECEIVING

See figure 1-1. Your Layton Remote Trax TC30-2 remote controlled tractor was completely inspected, tested, lubricated and filled with hydraulic fluid before leaving the factory. Carefully inspect for damage- you must note any damage on the carrier's bill of lading, and file a claim immediately with the freight company. If you receive damaged goods, contact your dealer for repair or replacement.



1. **Hydraulic Fluid Temperature Gauge.** This gauge indicates the temperature, in *Fahrenheit*, of hydraulic fluid in the reservoir.

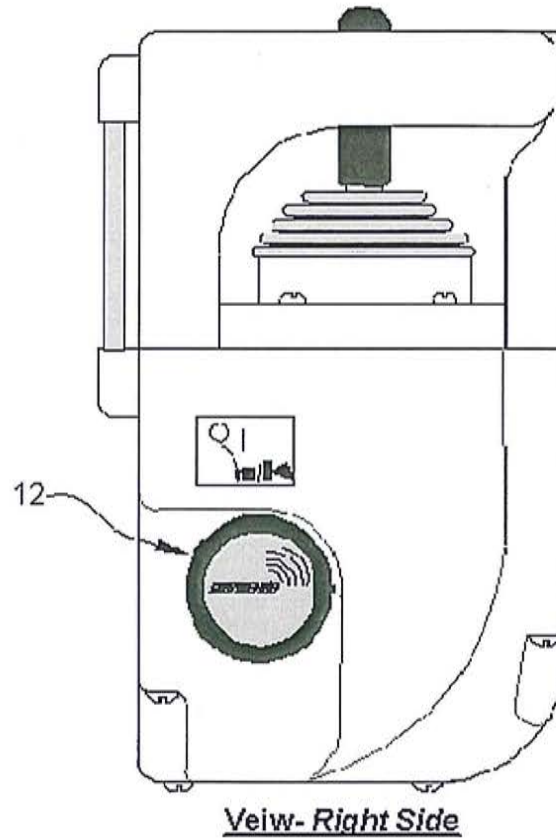
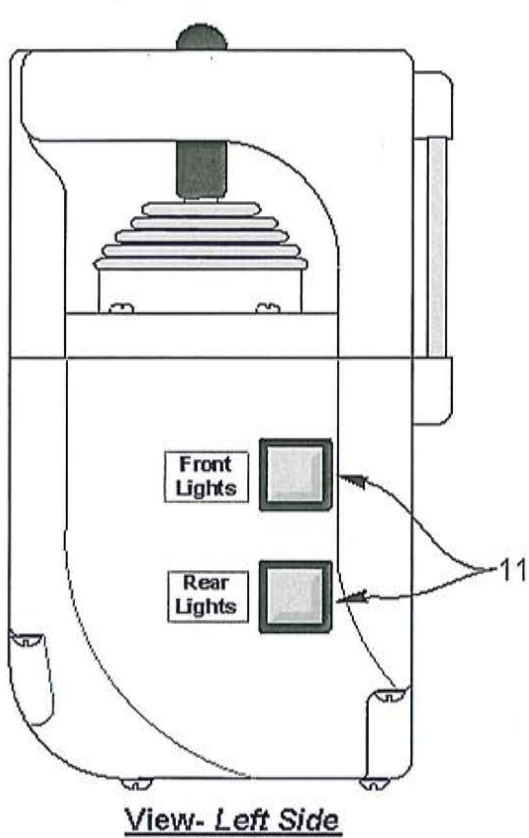
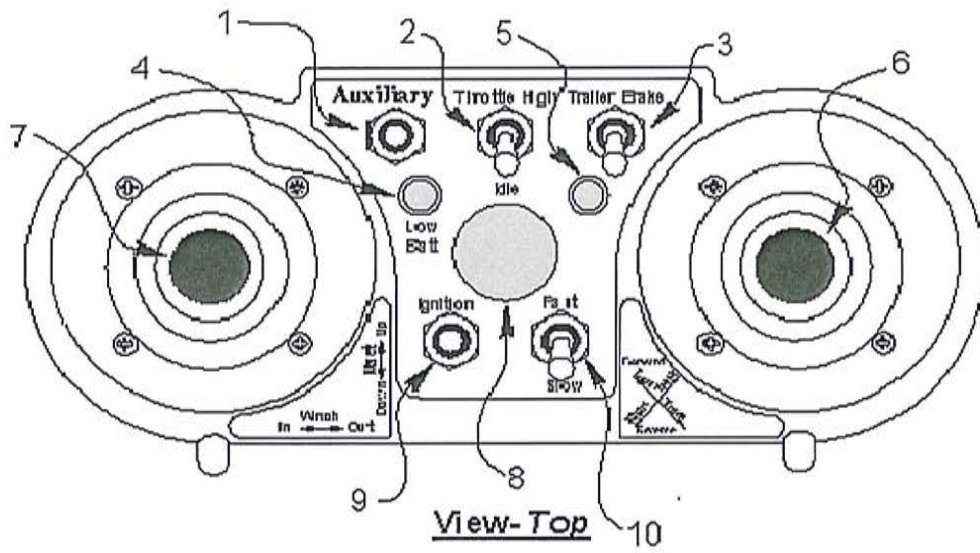
CAUTION

HYDRAULIC FLUID TEMPERATURE UNDER ANY CONDITIONS SHOULD NOT EXCEED 180° FAHRENHEIT.

2. **Fuel Level Gauge.** This gauge indicates relative fuel quantity-Empty, Half or Full tank.
3. **Water Temperature Gauge.** Indicates engine coolant temperature. Normal engine coolant temperature should never exceed 210°F (100°C).
4. **Oil Pressure Gauge.** Indicates engine oil temperature. Normal engine oil pressure 55-65 PSI.
5. **Ammeter.** This gauge indicates the charge/discharge state of the electrical system.
6. **Chronometer.** This analog timer records total system operation time in hours and tenths thereof. Use this gauge to track cycles of periodic maintenance.
7. **Key Switch.** Turn key clockwise to energize electrical system, turn the key counter-clockwise to shut down the tractor.

Instrument Panel

Operation 2.1



Operation 2.2

1. **Auxiliary Control.** This three position toggle (spring loaded to the neutral) controls a hydraulic directional valve for the operation of the optional 6-way blade, hydraulic anchor driver and other accessory implements.
2. **Throttle Switch.** This two position latching switch selects between engine idle (low RPM) and (high RPM) tractor operation mode.

NOTE: Throttle selector switch must be in the idle position to start the tractor.

3. **Trailer Brake On/Off.** (2-position latching switch) Standard on each TC30-2 tractor is the capability to control the 12 volt electric brakes common on to many modular unit undercarriages. Switch "up" position selects brakes "on".
4. **Low Battery Lamp.** When radio transmitter power is turned to the on position, two (2) quick illuminations accompanied by an audible "beep" indicate sufficient battery reserve. However if the lamp continues to blink (about once per second) accompanied by the audible beep, this indicates the battery may, or will soon need recharging. Operating the tractor with insufficient battery charge can affect radio communication and range of transmission.
5. **Transmitter Status Light.** This green lamp flashes on and off to indicate that the transmitter power switch is in the on position.
6. **Right Joystick.** This omni-directional, spring loaded return to center joystick controls the direction and speed of the tractor.
7. **Left Joystick.** The left joystick controls the mast and winch functions.
8. **Emergency Shut-Off.** This push-pull button kills the engine when pushed. Pull this button to the out position before restarting the tractor.
9. **Ignition Switch.** This momentary, two positions, spring return to center toggle with starts the tractor. This switch should be released immediately when the engine starts to reduce undue wear to the starter motor.
10. **Travel Speed Selector.** This two position latching switch limits maximum travel speed when in the slow (snail) position. It is generally recommended that the tractor be in low range (slow) when positioning loads. High range (fast) should be reserved for traversing larger distances over mild terrain.
11. **Front & Rear Lights On/Off.** Depress the button switch the lights on. Depress again to switch them off.
12. **Key Switch On/Off.** This dual function key-dial switch turns transmitter power on and initializes the engine start sequence.

Operation 2.3

Operating Procedures

Pre-Start

1. Check the hydraulic oil level and ensure that it is at the high mark on the dipstick.
2. Visually inspect the track chain for loose grouser or worn chain. Check for proper chain tension.
3. Check Emergency shut-off switches, make sure the contacts are intact.
4. Check engine oil level.
5. Check engine coolant level
6. Visually inspect the tractor for fluid leakage. Oil in the belly pan may indicate loose or worn hydraulic lines. Greenish fluid indicates leakage of engine coolant.

WARNING

**INJECTION HAZARD
HYRAULIC OIL LEAKS UNDER
HIGH PRESSURE MAY CAUSE
SERIOUS INJURY.**

7. Always begin a placement with a fully charged transmitter battery and at least one half of a tank of fuel.
8. Make certain that the warning beacon and beeper are intact and functioning.

Start Up

WARNING

**CLEAR THE IMMEDIATE AREA
AROUND THE TRACTOR OF PERSONS
OR OBSTRUCTIONS.**

CAUTION

**TAPPING ON GAUGE GLASS MAY
DAMAGE OR RUIN THE GAUGES.**

1. Turn the key switch on at the tractor.

NOTE: Before starting the tractor, make sure emergency stop button on the transmitter is pulled *out* and the throttle selector switch is in the *idle* position.

2. Turn the transmitter power "On" (keyswitch clockwise one click) you should hear a two burst tone indicating that the transmitter battery is good.
3. To energize the glow plug: Turn transmitter keyswitch clockwise ¼ turn and release (switch will spring return to the "ON" position).
4. Hold ignition switch up until the tractor starts.

NOTE: Release ignition switch immediately when engine starts to reduce damage to the starter motor.

5. Allow the engine to warm up at idle for 10-15 minutes before putting the unit to work. (Warm up times are relative to climate and ambient conditions)

NOTE: Tractor joystick controls may be oversensitive and handling characteristics may be "jerky" due to cold hydraulic oil if the unit is not allowed sufficient time to warm up.

Post-start

1. Once the unit has warmed up, check once again for leaks and listen for any unusual noises (loose fasteners etc.).
2. Check all instruments-when all indications are normal, the unit is ready for operation. Position the mast for transport, approximately 12" above the ground, before moving the tractor.
3. Familiarize yourself with the controls before putting the tractor to work in field conditions.

Operation 2.4

Shut-Down

Always shut down the remote trax by pressing the red push-button located in the center of the transmitter control panel. Then turn the key witch off at the tractors instrument panel.

NOTE: Before restarting the tractor you must rest the stop button on the transmitter control panel by pulling it back *out* to the start-up position. And remember, the ignition selector switch must also be returned to the *idle* position before restarting.

In the event of an emergency, the tractor can be shut-down by depressing either of the two emergency-stop switches, located on each tractor fender. (One at the rear of the right fender, the other at the front of the left fender)

NOTE: The emergency-stop switches are for EMERGENCY SHUT DOWN ONLY.

When shutting the tractor down normally, follow the shut down procedure outlined above.

Transporting the Tractor

Because loading and unloading the tractor onto and off of the toters and trailers often requires that the operator negotiate steep inclines and maneuver through tight spaces, it is doubly important that the hydraulic system be thoroughly warmed up and operating with maximum maneuverability.

CAUTION

ATTEMPTING TO MANEUVER TIGHT SPACES OR STEEP RAMPS BEFORE ALLOWING THE TRACTOR TO WARM UP CAN CAUSE THE TRACTOR TO COLLIDE WITH NEARBY OBSTRUCTIONS AND MAY ALSO CAUSE THE TRACTOR TO OVER SHOOT OR RUN OFF THE EDGE OF RAMPS.

WARNING

ALWAYS BACK THE TRACTOR UP AN INCLINE- WINCH END FIRST TO AVOID OVERTURNING.

Because the TC30-2 is designed to achieve stability under heavy load, the tractor tends to be heavy in the rear (winch) end when *not* under load. Therefore, the tractor *must be backed up* loading ramps and *must be run forward* down loading ramps.

Service 3.1

Introduction

Periodic inspection and service will assure long life and efficient performance of the Layton Remote Trax TC30-2. This section contains preventative maintenance, troubleshooting and preventative maintenance procedures.

Preventative Maintenance

In order to avoid breakdowns and reduce wear, equipment must be serviced regularly. Whenever the equipment is running continuously or operated in extreme conditions, the prescribed service intervals should be adjusted to provide more frequent inspection and lubrication.

LUBRICATION SPECIFICATIONS

1. Gear Oil

Use EP85/90 in the planetary gear boxes.

2. Hydraulic Oil

Use oil that conforms with ISO68 in the hydraulic oil reservoir and in the transmission.

3. Motor Oil

Use 15w40 motor oil in the crankcase.

4. Grease

Use multipurpose grease to lubricate ball and roller bearings and pivot points.

NOTE: Failure to use the recommended lubricants during the warranty period may void warranties, express or implied, on related components. Submit fluid samples with components returned for warranty consideration.

Service Instructions

1. Radiator

WARNING

THIS UNIT HAS A PRESSURIZED COOLING SYSTEM. REMOVE RADIATOR CAP SLOWLY IN ORDER TO PREVENT SUDDEN RELEASE OF PRESSURIZED COOLANT WHICH MAY CAUSE SEVERE BURNS.

Check coolant level daily. Flush and drain cooling system annually, and refill with 50/50 ethylene glycol/water mixture that includes a rust inhibitor.

NOTE: Accumulations of oil, coolant, and dust will cause engine to run hotter resulting in decreased efficiency. Keep the radiator free of debris.

For arctic (extreme cold weather) operation, you should consider installing a higher temperature thermostat and adjusting the coolant/water ratio to the coolant manufacturer's specifications for such climates.

2. Fan Belt

Check tension every 200 operating hours by pulling at the midpoint between pulleys. Adjust tension if deflection exceeds 3/4".

3. Engine

Check oil level daily. Replace crankcase oil and filter after the first 50 operating hours. Afterwards, change crankcase oil every 100 hours, and change oil filter every 200 hours.

Service 3.2

4. Fuel Filter

- A good grade of diesel fuel should be used.
- If the tractor is being fueled from a storage tank, the tank system must have a fuel filter
- If the tractor is going to operate in extreme cold weather, a fuel additive to prevent gelling must be used.
- Check daily for sediment and excess water. Excess water accumulation indicates a high concentration of water in the fuel. Drain water and/or sediment, and a minimum of fuel from the filter bowl. Also drain water from the fuel tank when evident in the filter bowl.

NOTE: Maintain fuel level at or above ½ full to minimize the risk of drawing water and sediment from the bottom of the tank through the injectors as well as reducing the potential for water condensation in the fuel tank.

- Replace the fuel filter every 200 operating hours.

5. Transmission

- Check fluid level daily. Use a hydraulic servicing unit with an inline filter or prefilter fluid before refilling.

6. Hydraulic Filters

CAUTION

CONTAMINATED HYDRAULIC FLUID CAN DRASTICALLY REDUCE THE LIFE OF EXPENSIVE HYDRAULIC COMPONENTS SUCH AS THE HYDROSTATIC TRANSMISSION, MOTORS, PUMPS AND CYLINDERS. DISCONNECTED HYDRAULIC LINES MUST BE COVERED TO PREVENT CONTAMINATION. CAP OR PLUG OPEN PORTS, LINES, OR FITTINGS DURING INSTALLATION, SERVICE OR REPAIR. ALWAYS THOROUGHLY CLEAN

AROUND AREAS WHERE SERVICE IS TO BE PERFORMED BEFORE EXPOSING ANY PART OF THE HYDRAULIC SYSTEM TO THE ENVIRONMENT.

- Change filter after the first 25 operating hours, and then every 50 hours thereafter.

NOTE: Fill new filter elements with filtered oil and wipe a light film of oil onto the rubber gasket before installing.

7. Battery

WARNING

KEEP BATTERY AWAY FROM SPARKS OR OPEN FLAMES WHILE CHARGING OR SERVING. ELECTROLYTE AS VAPORS MAY EXPLODE. DO NOT ALLOW ELECTROLYTE LEVEL TO DROP BELOW THE BOTTOM OF PLATES BECAUSE PLATE WARPAGE MAY RESULT.

- Check terminals for corrosion and electrolyte level every 100 hours. Ensure vent holes in plugs are open, and fill battery cells to the bottom of the vent holes.

NOTE: Maintain specific gravity recommended by the battery manufacturer.

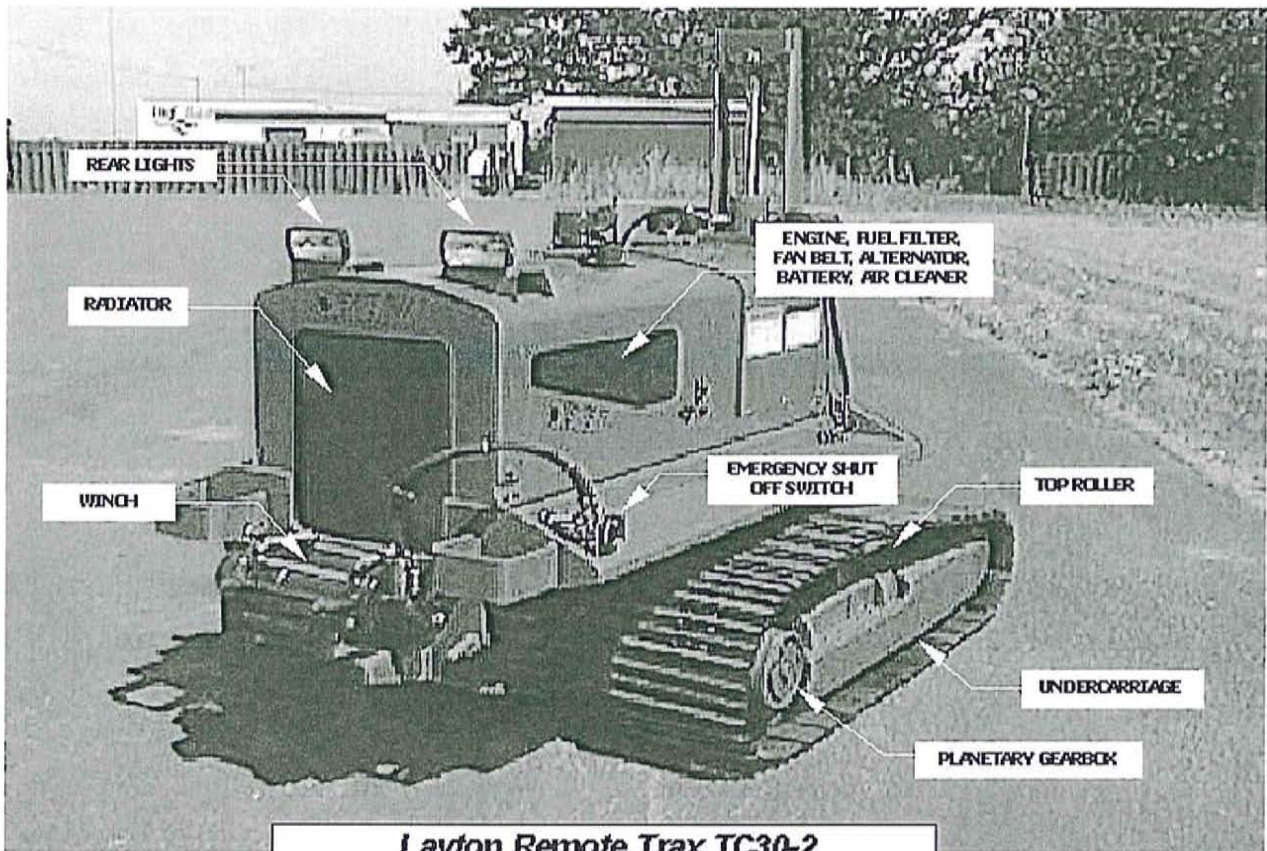
Clean battery as follows to ensure proper conductivity.

- Disconnect cables, ground cable first
- Verify that plugs are closed tightly
- Wash terminals with baking soda & water
- Rinse battery to remove cleaning solution.
- Reconnect cables, ground cable last.
- Coat terminals with petroleum jelly.

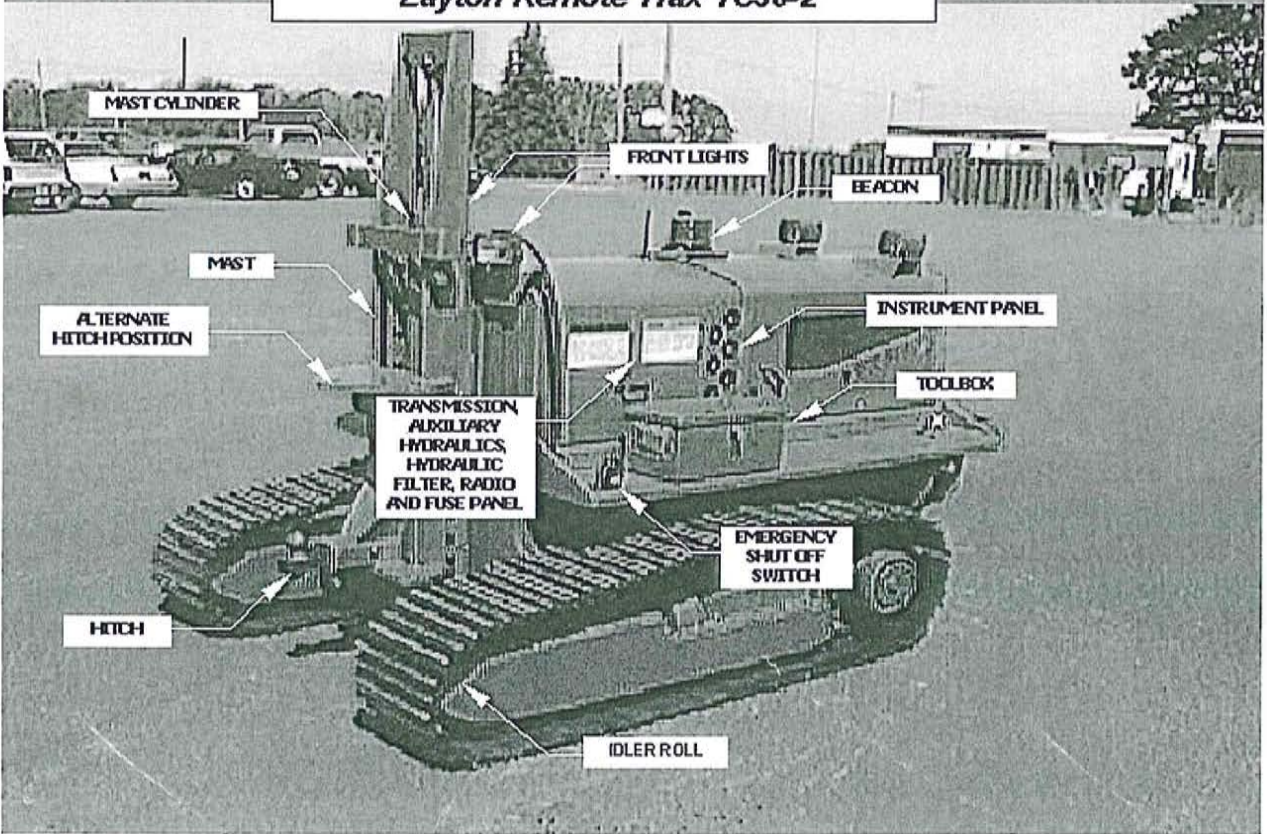
CAUTION

REVERSING BATTERY CABLES WILL DAMAGE THE ALTERNATOR.

Service 3.3



Layton Remote Trax TC30-2



Service 3.4

8. Air Cleaner

- Clean filter bowl daily or whenever engine smokes excessively. Check for leaks or dents daily.

NOTE: The engine manufactures warranty is void if the engine is damaged due to a neglected air cleaner.

- Replace the paper filter element every six months or 200 hours, whichever occurs first. Also Replace the element if you notice that the engine is losing power or smoking excessively, or if you discover pin holes or tears in the element.
- When replacing a filter element, thoroughly clean the inside of the air cleaner with a damp towel or rag. Make sure the gasket is seated properly.

9. Winch

- See winch operators manual for maintenance and replacement parts information.

10. Hydraulic Reservoir

CAUTION

DO NOT OVERFILL WATER, MOST LIKELY TO ACCUMULATE IN A HIGH HUMIDITY ENVIRONMENT, MAY DAMAGE THE TRANSMISSION OR OTHER HYDRAULIC COMPONENTS IF NOT REMOVED.

- Check fluid level daily. Ensure tractor is on a level surface before adding fluid. Completely drain and refill system with hydraulic oil every 1000 operating hours, or anytime contamination is suspected.

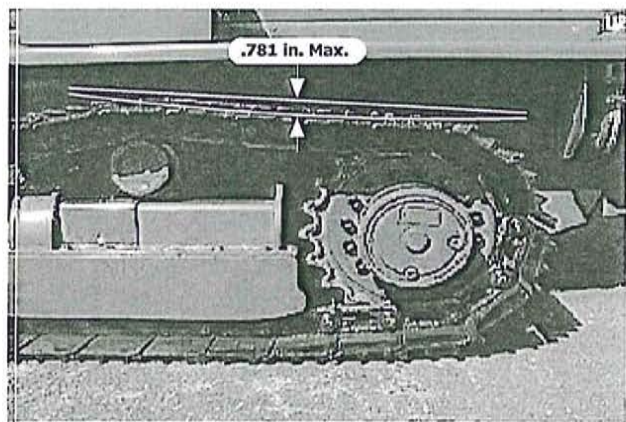
11. Planetary Gearboxes

- Inspect for leaks daily. Drain and refill after the first 50 operating hours, and every 100 hours thereafter.

NOTE: Place unit on level surface when refilling, DO NOT OVERFILL.

12. Tracks

- Cleaning- Track assemblies should be cleaned with a pressure washer or steam cleaner on a daily basis, or undue wear will occur. Worn track chains tend to derail from the undercarriage.
- Adjustment- Check track tension and inspect for wear daily to assure maximum track life. If tracks are over tightened, undue wear will occur. Under tightening will cause tracks to come off. Maintain track tension by limiting sag measured halfway between the top roller and the drive sprocket to .781". Track tension is adjusted by applying grease through a zerk fitting on the track tensioner.



- Track grouser- Check pads weekly- Make sure fasteners are tight.

NOTE: Track Grouser fasteners dry torque to 80ft. lbs with a 17 mm socket.

Service 3.5

13. Hydraulic Cylinders

CAUTION

A LEAKING SEAL WILL NOT CAUSE VISIBLE DAMAGE, BUT MAY RESULT IN FAILURE TO HOLD A LOAD.

- Check for leakage around the rod, and for nicked or dented rod/cylinder. Replace entire seal kit whenever servicing the cylinder.

14. Mast

- Inspect for visible damage. Lubricate mast at all four zerk fittings daily or every twelve operating hours. Verify smooth operation through the entire range of travel. Verify that the hitch and pin are properly installed and the cotter key is intact.

15. Hydraulic Lines and Fittings

CAUTION

DO NOT ATTEMPT TO TIGHTEN A FITTING WHILE THE TRACTOR IS RUNNING.

DO NOT OVERTIGHTEN FITTINGS TO STOP A LEAK.

- Inspect for leaks and loose lines. Most leaks can be stopped by replacing an O-ring.

16. Fasteners

- Inspect for loose or missing fasteners daily. Unless otherwise specified, Retorque applicable fasteners every six months.

3.3 Troubleshooting

The most common operating situations, probable causes and recommended corrective actions are described in the following paragraphs.

3.3.1 Power Train Overheating

- Overloading the tractor while in full speed. Reduce speed when tractor is loaded.
- Prolonged operation with heavy load. Allow 2-3 minutes cool down time before resuming operation.
- Plugged/ contaminated oil cooler fins. Service radiator/oil cooler as outlined in paragraph 3.2.2

CAUTION

CLEAN ONLY AFTER ALLOWING TRACTOR TO COOL DOWN.

- Low engine/hydraulic oil levels. Service engine/hydraulic reservoir as outlined in paragraph 3.2.2

CAUTION

WHEN EXCEEDING HIGH PRESSURE RELIEF, TEMPERATURE INCREASES APPROXIMATELY 2-4 DEGREES PER MINUTE

- Exceeding transmission high pressure relief. Allow temperature to stabilize and then minimize maneuvering. If overtemp resulted after attempting to maneuver over unstable terrain, try winching out.

Service 3.6

Sluggish Starting

- Low battery output voltage. Service battery as described on page 3.2
- Engine malfunction overloading starter or defective starter. Service engine/starter.
- Corrosion on battery terminals causing high resistance resulting in low output voltage.
- Loose, frayed or corroded battery cables resulting in low battery output voltage. Service battery as described on page 3.2
- Extreme cold temperatures resulting in low battery output voltage.

Hydraulic System Overheating

CAUTION

CONTINUED OPERATION WHEN HYDRAULIC FLUID TEMPERATURE EXCEEDS 190° (90°C) WILL RESULT IN SEVERE TRANSMISSION DAMAGE. DISCONTINUE OPERATION UNTIL THE CAUSE OF OVERHEATING IS DETERMINED AND CORRECTED.

- Check cooler fan. If fan is not operating with the ignition switch on, check 20 amp inline fuse under hood.
- Plugged hydraulic filter. Service hydraulic filter as described on page 3.2.

CAUTION

DO NOT USE A PRESSURE WASHER ON THE OIL COOLER.

- Plugged/ contaminated oil cooler fins. Oil cooler fins should be kept free from debris. If they become plugged or contaminated they should be cleaned. Use a water soluble degreaser and water to clean. Debris can be cleared with *low pressure* air.
- Exceeding transmission high pressure relief. Allow temperature to stabilize, and then minimize maneuvering. If overtemp resulted after attempting to maneuver over unstable terrain, try winching out.
- Overloading the tractor at half speed or excessive “lugging” at full speed. Reduce load, increase speed and/or minimize maneuvering.

Parts 4.1

Introduction

- This illustrated parts list identifies the subassemblies and replaceable components for the Layton Remote Trax remotely controlled tractor. All components that can be separately identified are listed.

Parts Information

How to Order Parts

To insure promptness and accuracy in filling your order, the following information **MUST** be given.

1. Name and address of person or company to whom the invoice is to be sent.
2. Name, address and phone number where parts are to be sent.
3. Shipping instructions :(UPS,Truck,Air,etc.)
4. Transportation charges (prepaid or collect)
5. Your order number
6. Model number of the machine
7. Serial number of the machine
8. Quantity of part(s)
9. Part numbers
10. Description of parts

Buying Parts Not Manufactured By Layton Manufacturing Company.

Many parts purchased by Layton Manufacturing Company may look like standard parts, but are in fact manufactured to special tolerances, or special alloys, or have been specially heat treated; consequently, serious problems can arise if these facts are not realized and substandard parts are substituted unknowingly. We realize that in many cases it may be more convenient to buy stock parts direct, rather than through Layton Manufacturing Company. We have identified these items in our parts list. However in the event of unsatisfactory performance resulting from the use of stock items not identified as such, Layton Manufacturing Company WILL NOT be held responsible.

Receipt of Parts

Layton Manufacturing Company defers responsibility for broken, lost or damaged goods, when upon delivery of the merchandise the transportation company from whom a receipt shows that the shipment was received in good condition. If any material is short and/or damaged, a notation should be on the carrier agent's bill.

Returning Parts

Permission to return parts or equipment **MUST** be received from Layton Manufacturing Company before returning parts. When requesting permission, itemize the parts and quantities to be returned and show the **INVOICE NUMBER AND DATE** of original purchase. Transportation charges **MUST** be **PREPAID**. Refer to Warranty Page, Limited Warranty and Limitation of Liability, for additional information.

Format

Component parts list are presented in 6 parts groups. Illustrations are accompanied by a 5 column reference chart.

Item

Index numbers found in this column correspond to the numbers found on the respective parts location illustration. Some items are illustrated primarily to show their orientation to other parts or systems.

Notes

This column identifies footnotes applicable to specified items.

Part Number

This column lists the Layton Manufacturing Company part number.

Parts 4.2

Qty

This column lists the total number of a specific item required per assembly or subassembly. This number may not necessarily be the number of items used in the end item or system. Only one set of components is listed whenever the components of two or more assemblies are the same.

“A/R” (As Required) identifies bulk items whose length or other dimension must be specified when requisitioning.

Group 1 Chassis

Main Hood	Page 4.3-4.4
Front Hood	Page 4.5-4.6
Middle Bulkhead	Page 4.7-4.9
Front Bulkhead	Page 4.10
Rear Bulkhead	Page 4.11
Frame Rails	Page 4.12-4.13
Junction Box	Page 4.14
Emergency Stop Switch	Page 4.15
Trailer Brake Cord Reel	Page 4.16
Toolbox	Page 4.17
Fuel reservoir	Page 4.18-4.19
Hydraulic Reservoir	Page 4.20-4.21
Winch	Page 4.22-4.24
Mast	Page 4.25

Group 2 Hydraulic

Hydraulic Lines	Page 4.27
Hydraulic Fittings	Page 4.28
Mast Cylinder	Page 4.29
Throttle Cylinder	Page 4.31
Auxiliary Manifold	Page 4.32
Dump Valve	Page 4.33
Junction Box	Page 4.34
Emergency Stop Switch	Page 4.35

Group 3 Electrical

Lights	Page 4.36
Beacon	Page 4.37
Emergency Stop Switch	Page 4.38
Wiring Diagram	Page 4.39-4.40

“Ref” identifies items for reference purposes only.

“NSS” (not sold separately) identifies items which must be ordered as a set because they are closely mated at manufacture.

Description

This column lists the item nomenclature necessary to identify the item. Additionally, cross-reference for repairable subassemblies will be found in this column.

Group 4 Undercarriage

Track Chains	Page 4.41
Track Frame Assembly	Page 4.42-4.43
Bottom Rollers	Page 4.44
Top Rollers	Page 4.45
Idlers	Page 4.46
Yoke Assembly	Page 4.47

Group 5 Drive Train

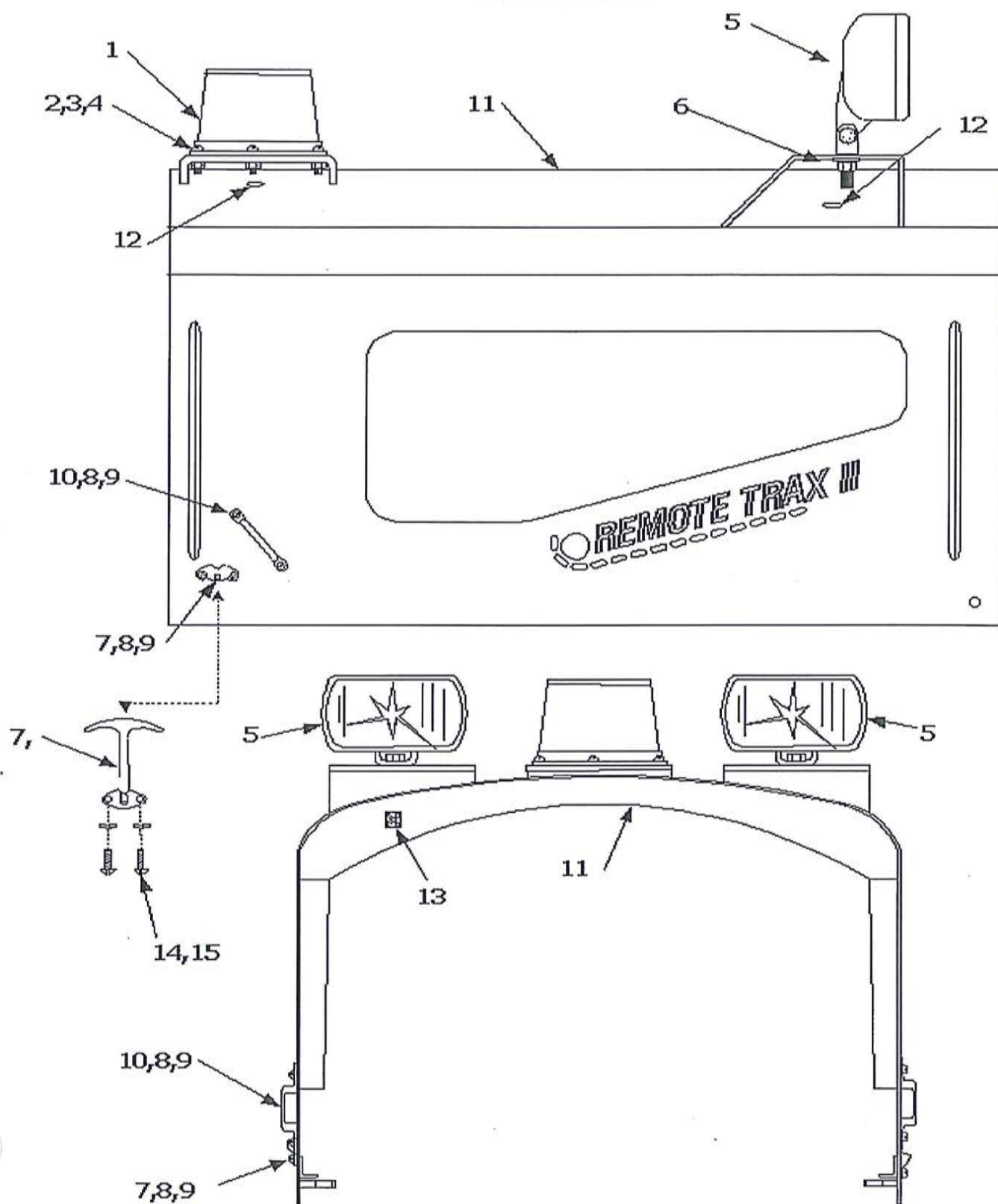
Engine/Air Cleaner	Page 4.48-4.49
Exhaust/ Radiator/ Oil Cooler	Page 4.50
Drive Coupling	Page 4.51
Planetary Gearboxes	Page 4.52
Fuel Separator	Page 4.53

Accessories

Blade Assembly	Page 4.55-4.56
Blade Hydraulics	Page 4.57-4.58
Blade Angle Cylinder	Page 4.59
Blade Tilt Cylinder	Page 4.60

Parts 4.3

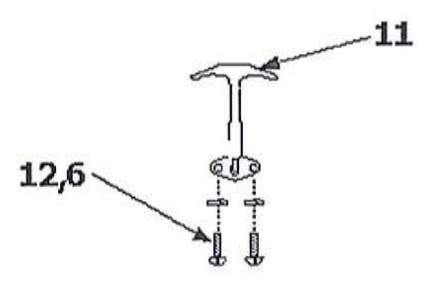
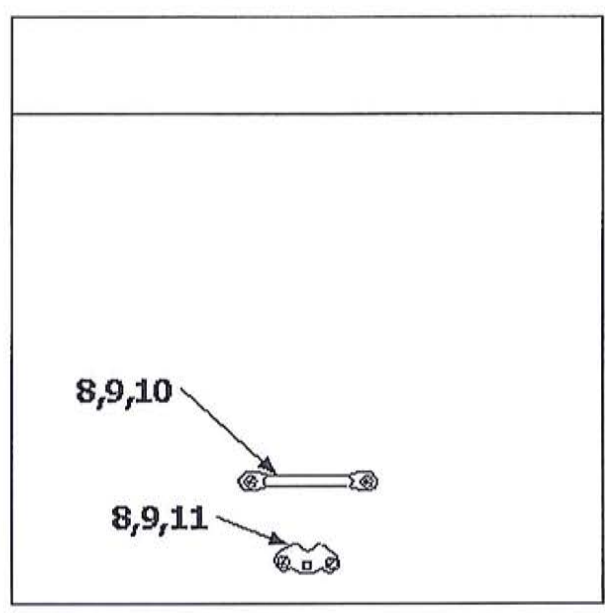
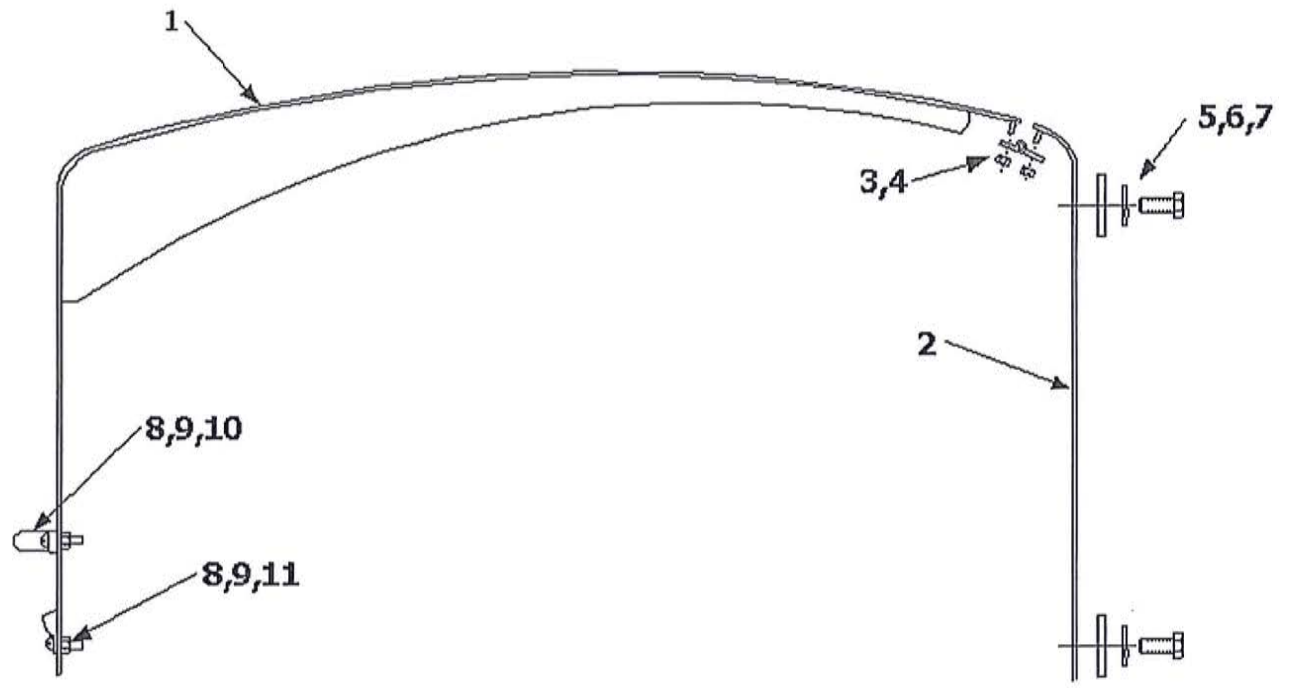
MAIN HOOD



MAIN HOOD

ITEM	NOTES	PART NUMBER	QTY	
1.		7814	1	Strobe Light
2.		10608	6	Capscrew
3.		606939	6	Nut
4.		607630	6	Lockwasher
5.		7609	2	Light Assembly
6.		500058	2	Lockwasher
7.		7783		Hood Latch Catch
8.		12567	4	Screw
9.		12568	4	Nut
10.		7788	2	Handle
11.		7798	1	Hood Weldment
12.		U10-13	5	Grommet
13.		7824	23	Wire Tie, Adhesive Backing
14.		500606	2	Capscrew
15.		500071	2	Lockwasher

FRONT HOOD

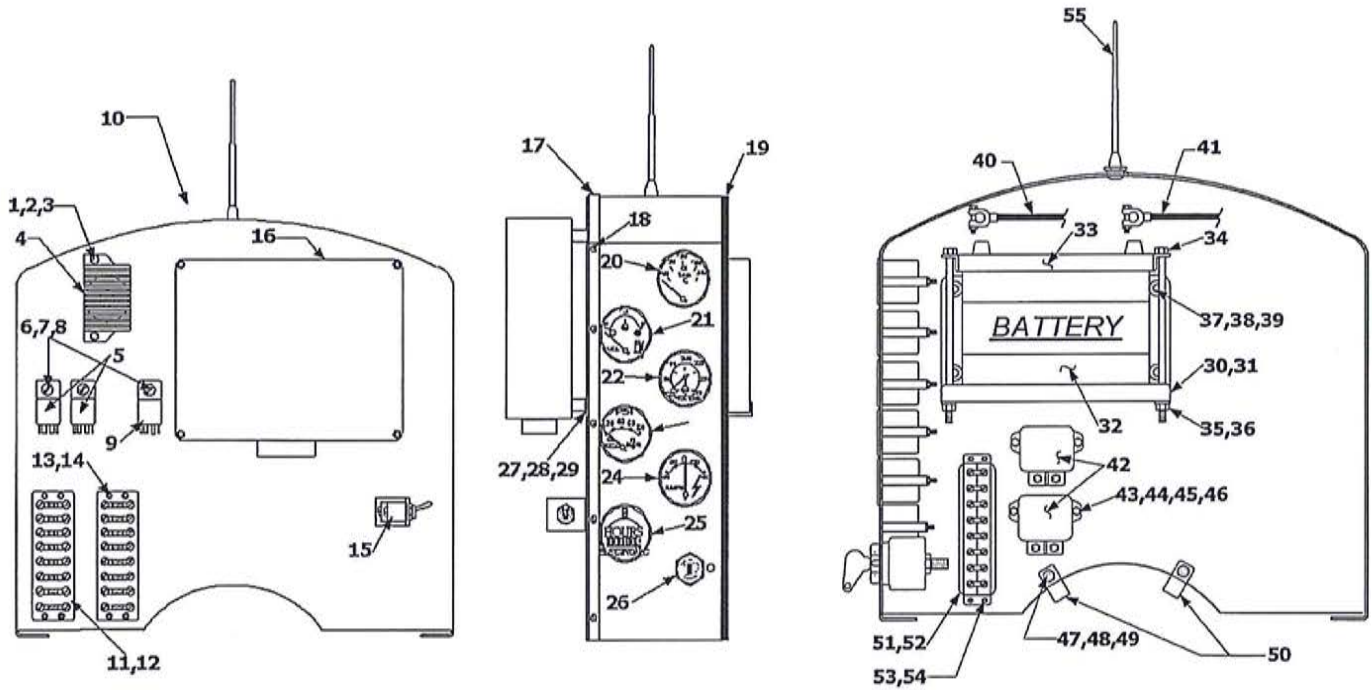


Parts 4.6

FRONT HOOD

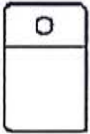
ITEM	NOTES	PART #	QTY	DESCRIPTION
1		7770	1	WMNT. FRONT HOOD
2		7666A	1	HOOD, FIXED
3		7793	1	HINGE, FRONT HOOD
4		12566	14	NUT
5		500562	5	CAP SCREW
6		500071	7	LOCKWASHER
7		500072	5	FLATWASHER
8		12567	4	SCREW
9		12568	4	NUT
10		7788	1	HANDLE
11		7783	1	T-LATCH
12		500606	2	SCREW

MIDDLE BULKHEAD ASSEMBLY

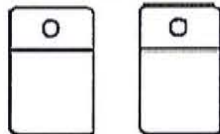


Parts 4.7B- Service Addendum

Emergency Stop Relay

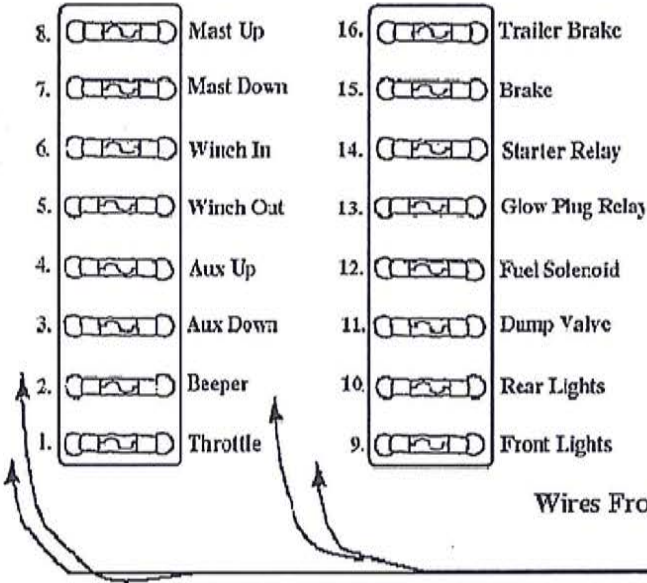
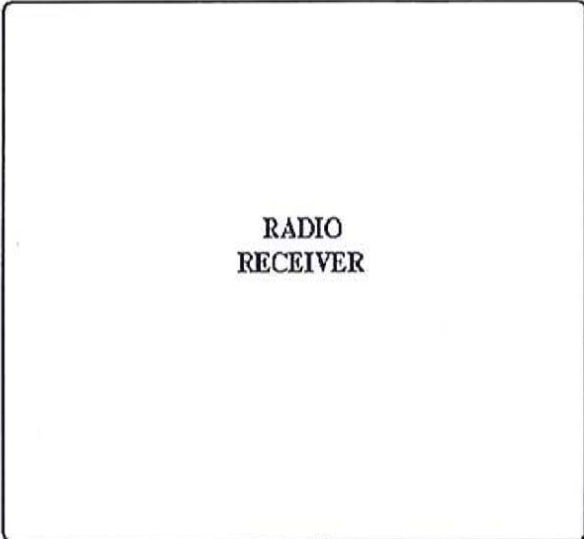


Front & Rear Light Relays



Note:

Do not Rely on visual inspection to detect bad fuses, if a blown fuse is suspected discard that fuse and replace with a known good fuse.



Parts 4.8

MIDDLE BULKHEAD ASSEMBLY

ITEM	NOTES	PART #	QTY	DESCRIPTION
1		500446	2	NUT
2		335	2	CAPSCREW
3		500447	2	WASHER
4		587141	1	BEEPER
5		7604	2	FLOOD LIGHT RELAYS
6		500136	3	SCREW
7		606631	3	NUT
8		607630	3	WASHER
9		7626	1	E-STOP RELAY
10		7796	1	MIDDLE BULKHEAD WELDMENT
11		5601175	1	FUSE PANEL
12		7248	1	PAD
13		G24-8327	8	SCREW
14		5601405	16	NUT
15		7888	1	ANCHOR DRIVE SWITCH ASSEMBLY
16		7634	1	RECEIVER
17		7627	1	HOOD LACE
18		7320	15	POP RIVET
19		10822	1	QUICK EDGE
20		7823	1	TEMP GAGE (HYDRAULIC)
21		7752	1	FUEL GAGE
22		7751	1	WATER TEMP GAGE
23		7754	1	OIL PRESSURE GAGE
24		7750	1	AMP GAGE
25		7753	1	HOUR METER
26		588095	1	IGNITION SWITCH
27		550729	4	CAPSCREW
28		550771	4	FLATWASHER
29		7247	4	LOCKWASHER
30		7587	1	BATTERY SHELF

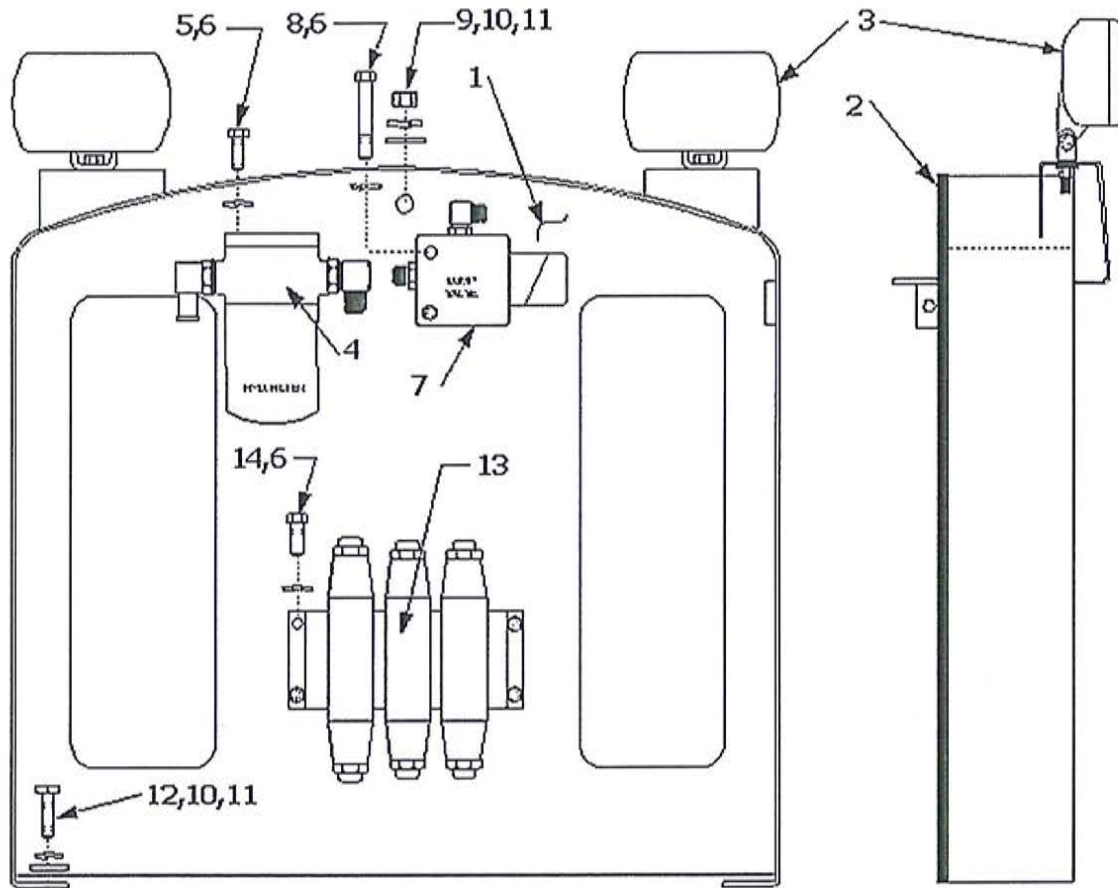
Parts 4.9

MIDDLE BULKHEAD ASSEMBLY- CONT'D

ITEM	NOTES	PART #	QTY	DESCRIPTION
31		7815	1	BATTERY SHELF PAD
32		587109	1	BATTERY
33		7304	1	BATTERY HOLD DOWN
34		588144	2	CAPSCREW
35		500012	2	NUT
36		500056	2	WASHER
37		606474	4	SCREW
38		500056	4	WASHER
39		500012	4	NUT
40		7615	4	GROUND CABLE
41		7614	4	POSITIVE CABLE
42		588167	2	RELAYS
43		500562	4	CAPSCREW
44		5601975	4	FLATWASHER
45		500071	4	LOCKWASHER
46		500070	4	NUT
47		500083	2	CAPSCREW
48		500021	2	NUT
49		500056	2	LOCKWASHER
50		6080370	3	WIRE CLAMP
51		7219	1	TERMINAL STRIP
52		587113	1	PAD
53		G24-827	4	SCREW
54		5601405	8	NUT
55		7456	1	ANTENNA
56		500159	4	CAPSCREW
57		500056	4	LOCKWASHER
58		500004	4	FLATWASHER

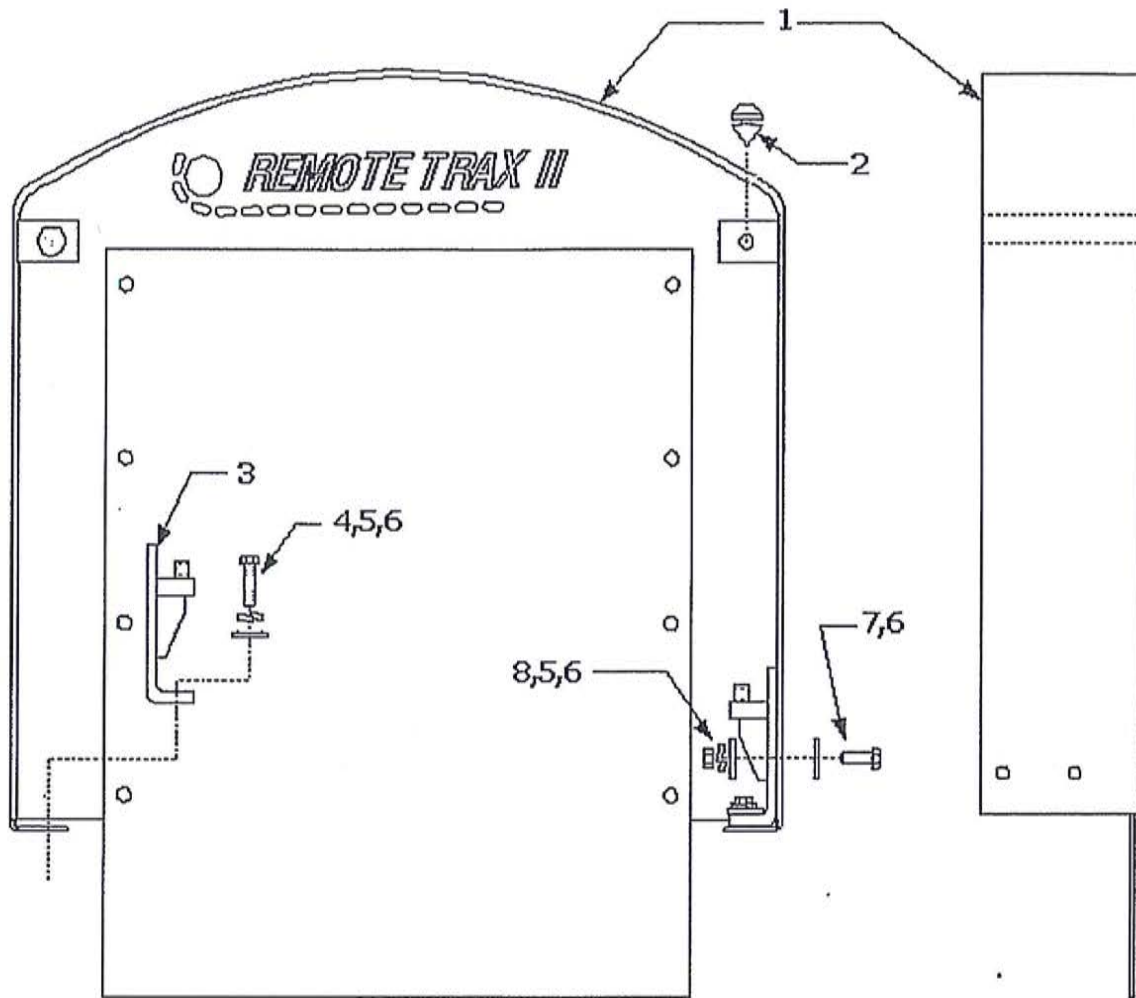
Parts 4.10

FRONT BULKHEAD ASSEMBLY



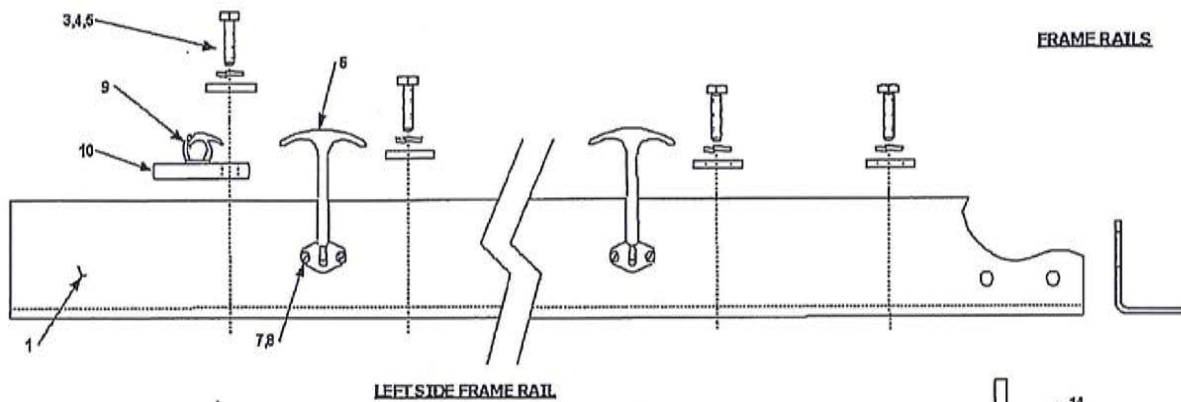
ITEM	NOTES	PART #	QTY	DESCRIPTION
1		7795	1	FRONT BULKHEAD
2		10822	1	QUICK EDGE
3		7609	2	LIGHT ASSEMBLY
4		7618	1	FILTER ASSEMBLY
5		335	4	SCREW
6		500056	10	WASHER
7		7596	1	DUMP VALVE ASSEMBLY
8		500705	2	SCREW
9		500012	1	NUT
10		500056	5	LOCKWASHER
11		500004	5	FLATWASHER
12		607172	4	SCREW
13		7593	1	AUXILIARY MANIFOLD ASSEMBLY
14		603221	4	SCREW

REAR BULKHEAD ASSEMBLY

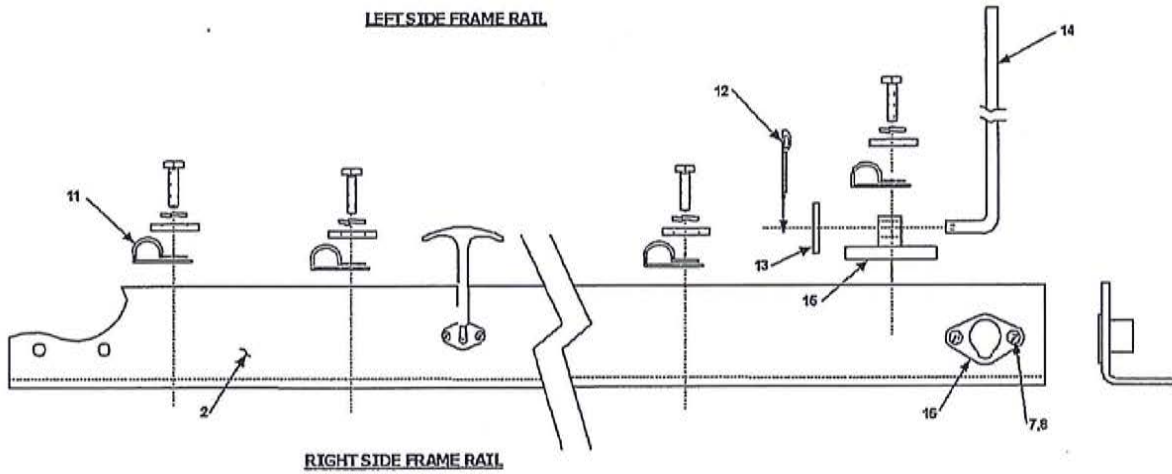


ITEM	NOTES	PART#	QTY	DESCRIPTION
1		7590	1	REAR BULKHEAD WELDMENT
2		7794	2	RUBBER HOOD STOP
3		7822	2	BRACKET, HOOD MOUNT
4		607172	4	SCREW
5		500447	8	LOCKWASHER
6		588115	12	FLATWASHER
7		11535	4	SCREW
8		500446	4	NUT

PARTS 4.12



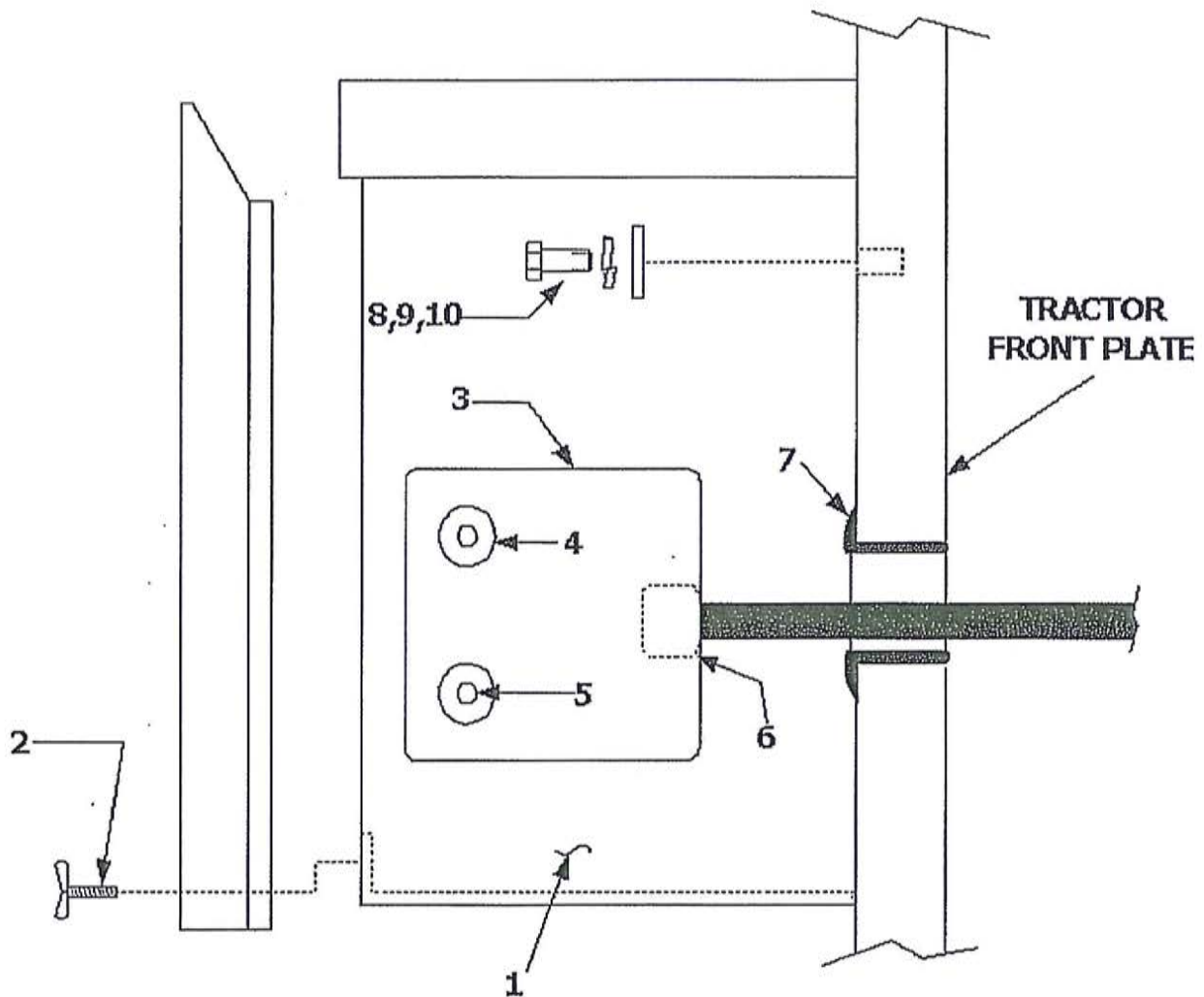
FRAMERAILS



FRAME RAILS

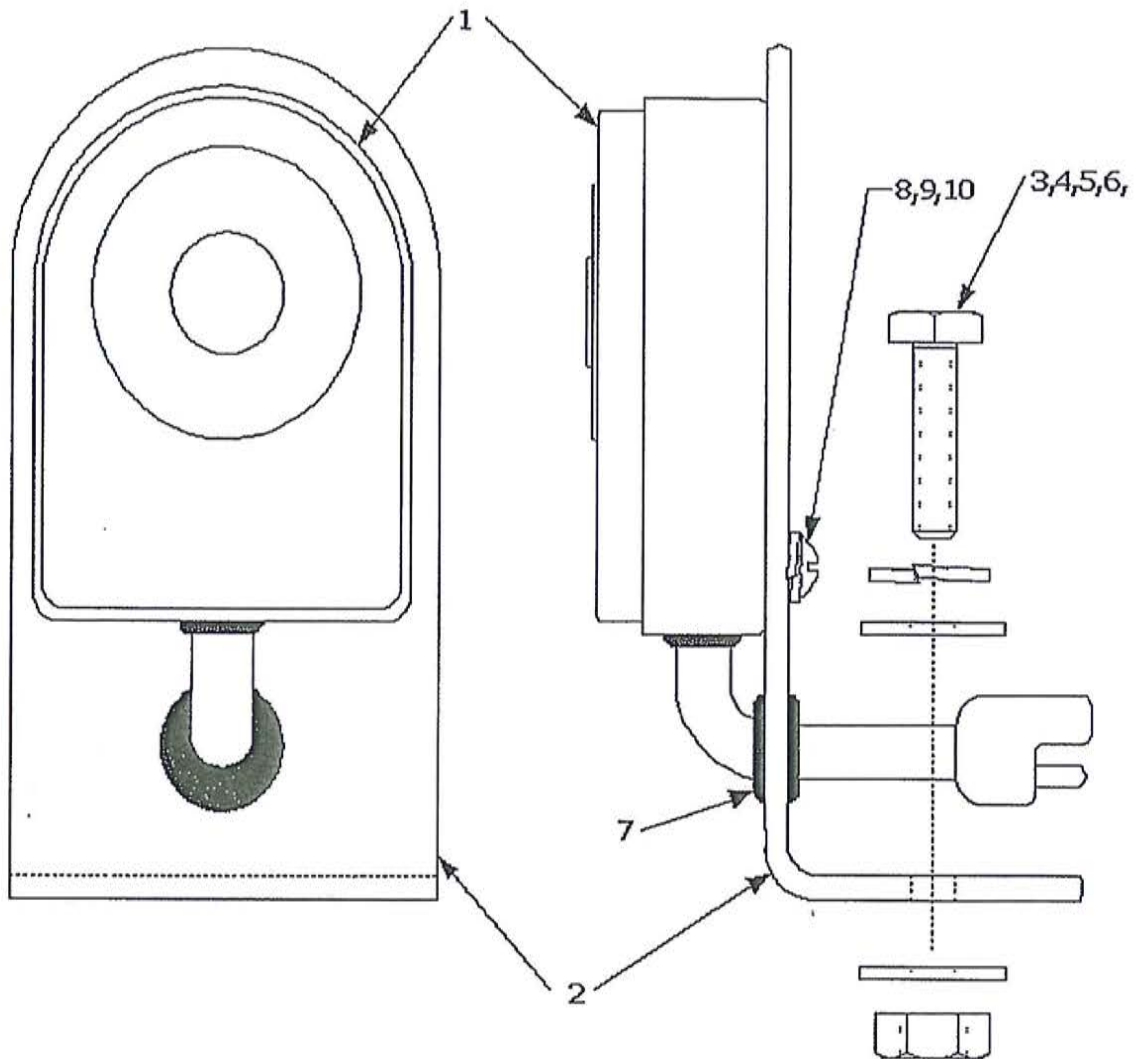
ITEM	NOTES	PART#	QTY	DESCRIPTION
1		7559	1	FRAME RAIL L.H.
2		7672	1	FRAME RAIL R.H.
3		607172	8	SCREW
4		500447	8	LOCKWASHER
5		588115	8	FLATWASHER
6		7783	3	HOOD LATCH
7		500606	8	SCREW
8		500071	8	LOCKWASHER
9		7765	1	WIRE TIE, ADHESIVE BACKING
10		7789	1	ROD REST
11		6080370	4	WIRE GUIDE
12		500481	1	COTTER KEY
13		6080613	1	SAE WASHER
14		7790	1	HOOD ROD
15		7791	1	HOOD ROD BRACKET
16		7889	1	PLUG SOCKET ASSEMBLY

TRAILER BRAKE JUNCTION BOX ASSEMBLY



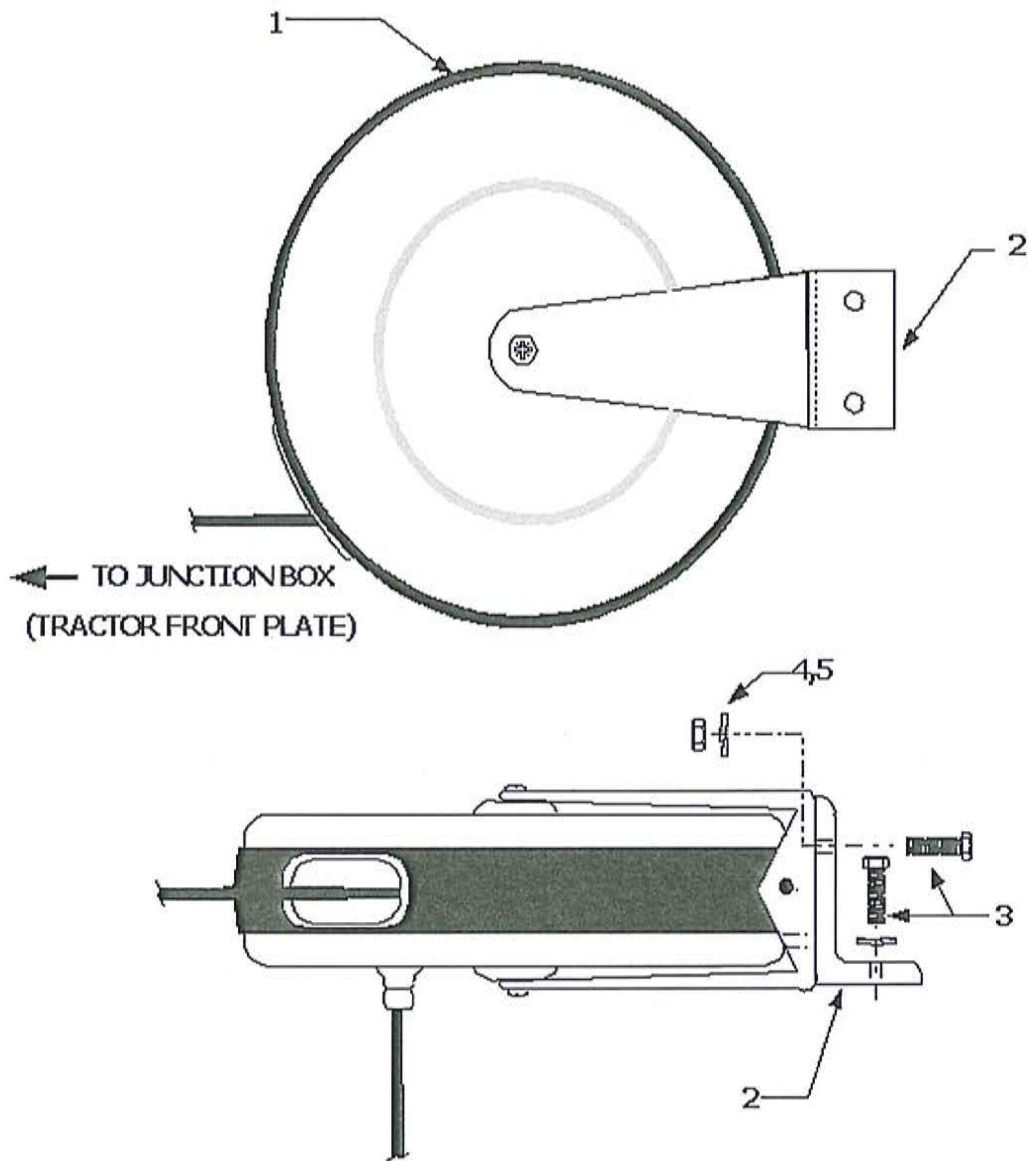
ITEM	NOTES	PART#	QTY	DESCRIPTION
1		7717		J-Box, STEEL
2		7726		WING SCREW
3		7716		J-Box, PLASTIC
4		7714		BANANA PLUG, BLACK
5		7713		BANANA PLUG, RED
6		7724		STRAIN RELIEF BUSHING
7		7723		BUSHING
8		500562		SCREW
9		500071		LOCKWASHER
10		500072		FLATWASHER

EMERGENCY STOP SWITCH



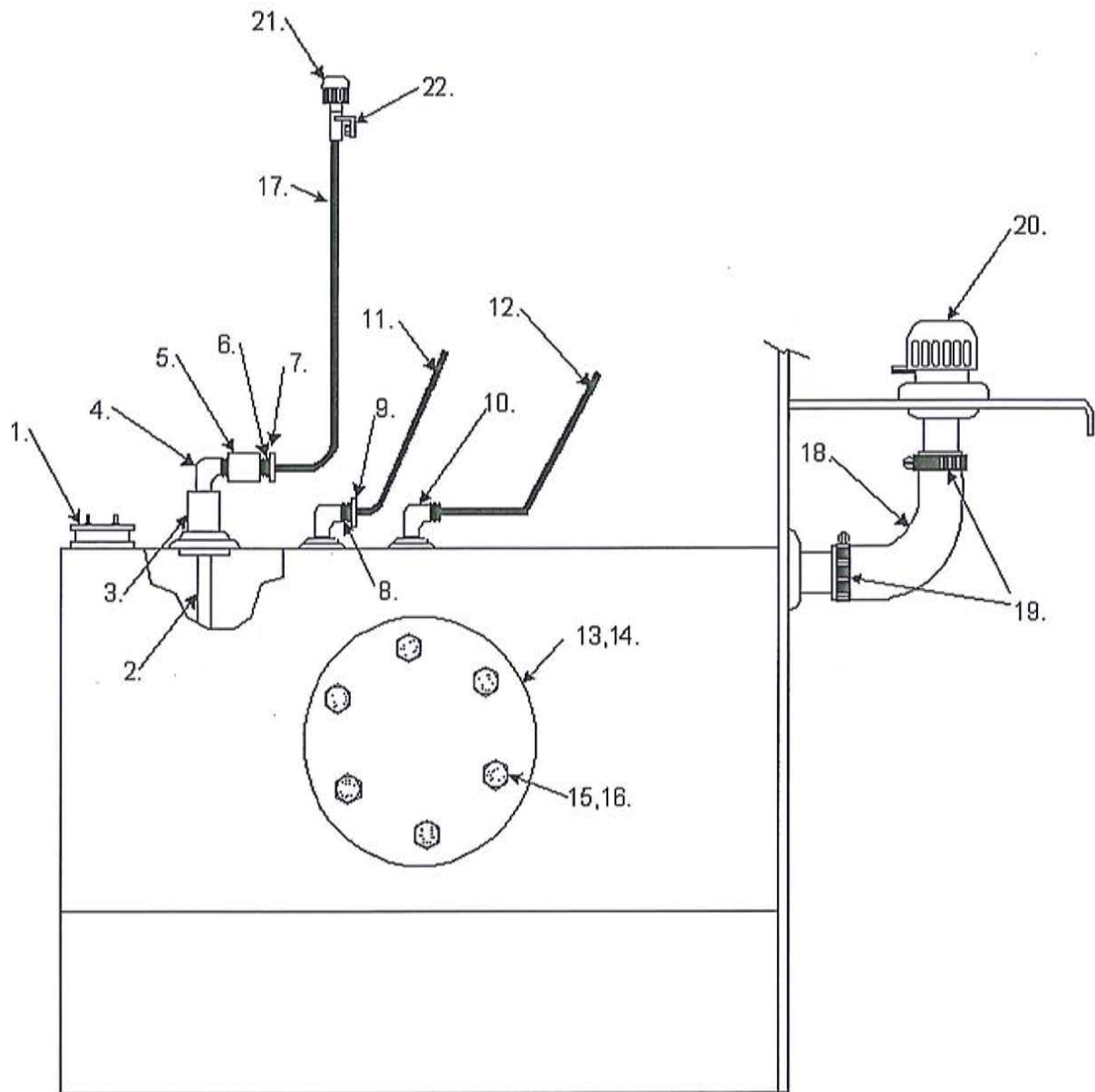
ITEM	NOTES	PART#	QTY	DESCRIPTION
1		7290	1	E-STOP SWITCH ASSEMBLY
2		587103	1	E-STOP SWITCH BRACKET
3		607179	2	SCREW
4		500071	2	LOCKWASHER
5		500072	2	FLATWASHER
6		500070	2	NUT
7		UI0-13	1	GROMMET
8		500136	2	SCREW
9		606631	2	NUT
10		607630	2	LOCKWASHER

Trailer Brake Cord Reel



Ite m	Note s	Part#	Qty	Description
1		7550		Trailer Brake Cord Reel
2		7549		Reel Mount Bracket
3		500562		Screw
4		500784		Nut
5		5601975		Lockwasher

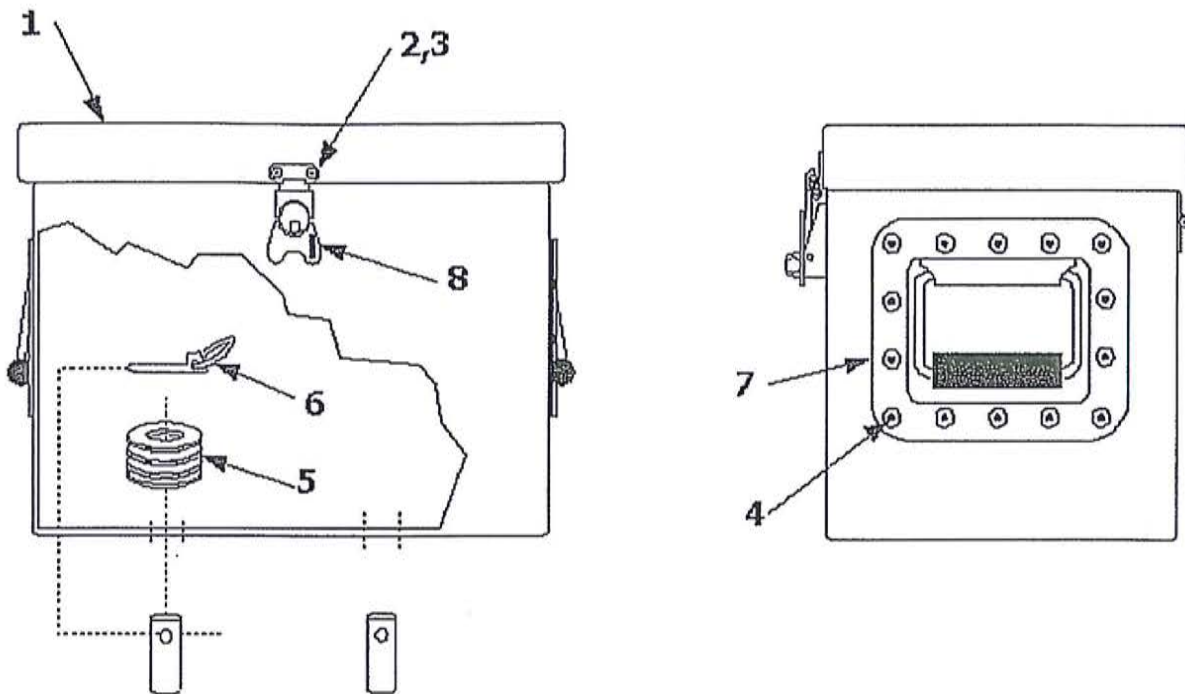
Fuel Assembly



Fuel Assembly

Item	Notes	Part#	Qty	Description
1		588054	1	Fuel Sensor
2		587105	1	Pipe
3		587106	1	Fitting
4		587160	1	Fitting
5		588069	1	Check Valve
6		7271	1	Fitting
7		525284	4	Clamp
8		E1506-4-4	1	Fitting
9		525284	1	Clamp
10		E1506-4-4	1	Fitting
11		7709	1	Hose, Return
12		7711	1	Hose
13		587147-1	1	Cover
14		7270	1	Gasket
15		500083	6	Capscrew, Hex 3/8-16x1"
16		6080613	6	SAE Washer 3/8"
17		7710	1	Hose Suction
18		7758	1	Hose, Fuel Filler
19		588136	2	Clamp
20		7032	1	Filler, Breather
21		587161	1	Breather
22		587084	1	Breather, Bracket

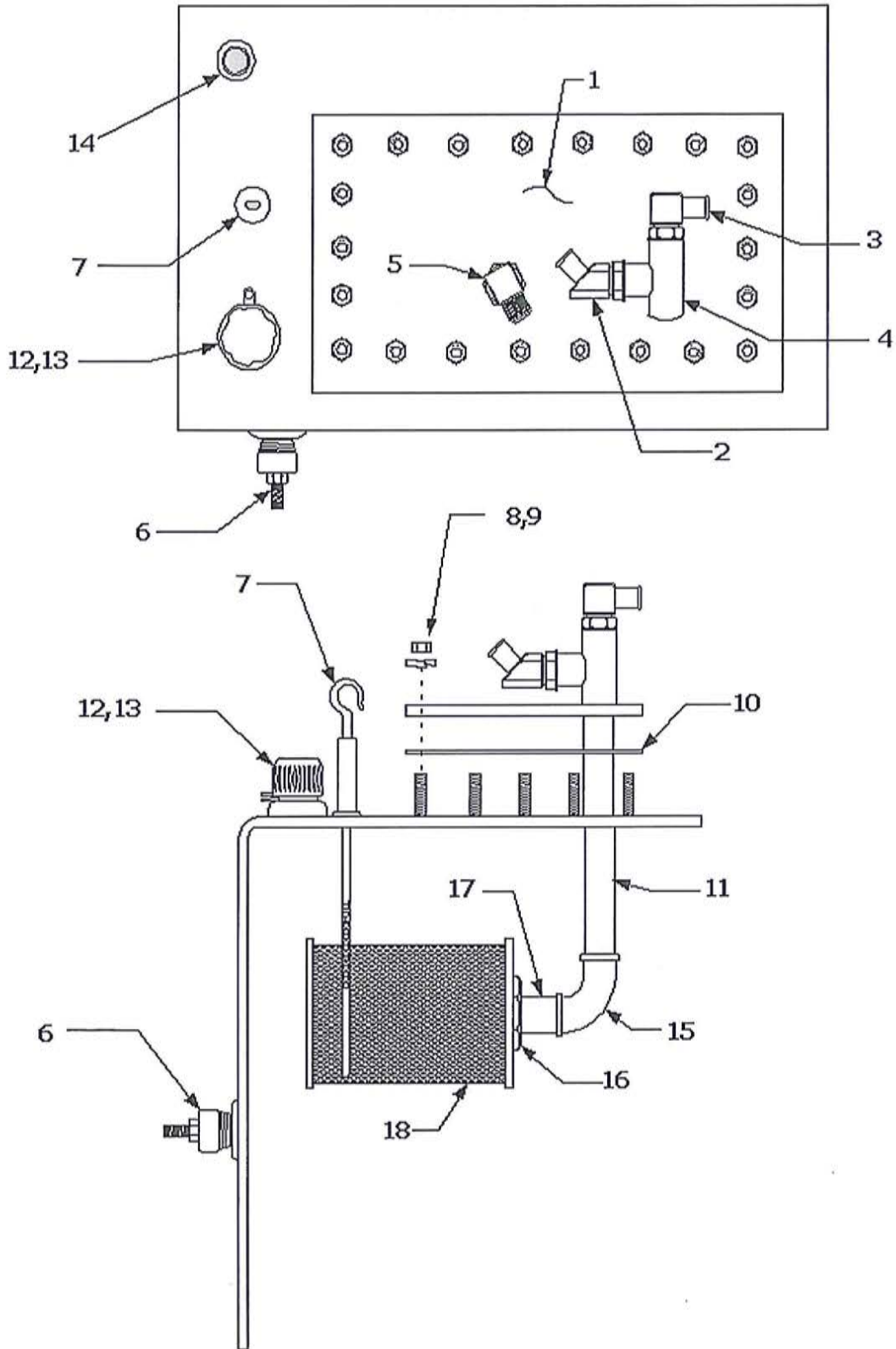
TOOLBOX ASSEMBLY



L.H. Tractor Fender

ITEM	NOTES	PART#	QTY	DESCRIPTION
1		7771-A		TOOL BOX
2		7706		CATCH
3		12320		RIVET
4		7320		RIVET
5		500189		WASHER
6		500412		KLIK PIN
7		7704		HANDLE
8		7705		LATCH

Hydraulic Reservoir

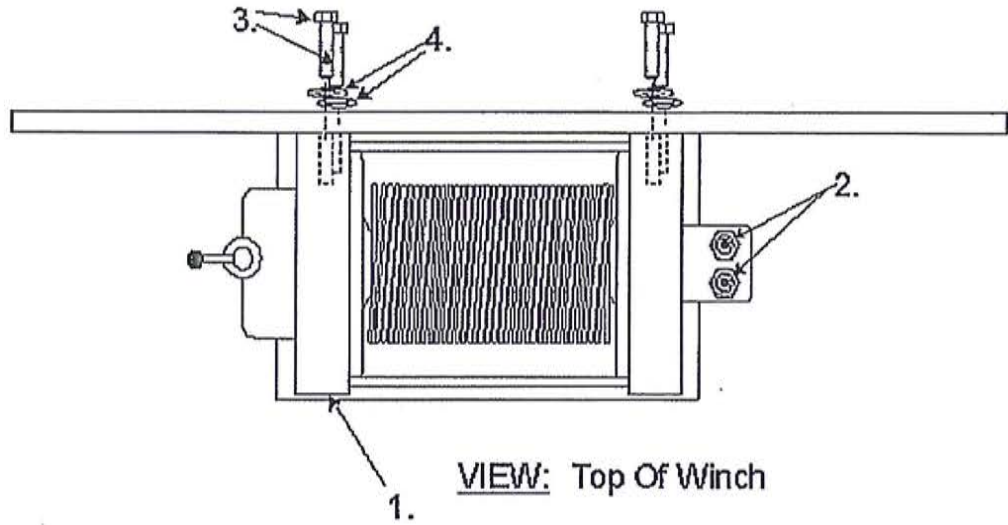
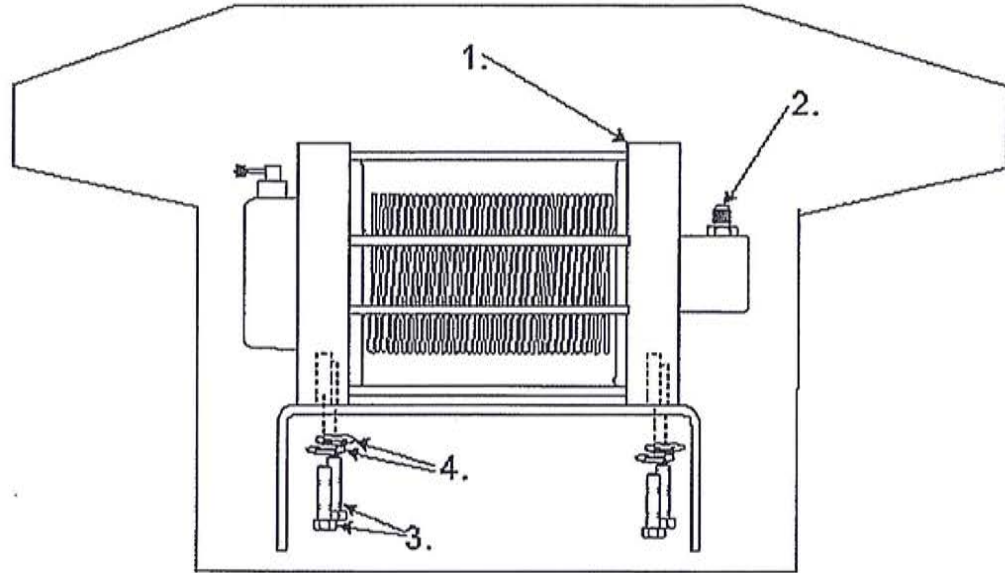


Hydraulic Reservoir

Ite m	Note s	Part#	Qty	Description
1		7545	1	Hydraulic Tank Lid Wldm nt
2		7731	1	Fitting
3		7730	1	Fitting
4		7733	1	Suction Manifold Weldme nt
5		500515	1	Fitting
6		7892	1	Hydraulic Oil Temp Send er
7		7729	1	Dip Stick
8		500056	22	Nut
9		500012	22	Washer
10		7536	1	Gasket
11		12537	1	Pipe Nipple
12		7032	1	Filler/Breather
13		10608	6	Screw
14		12552	1	Fitting
15		12536	1	Elbow
16		12535	1	Bushing
17		12563	1	Pipe Nipple
18		7033	1	Suction Filter

WINCH ASSEMBLY

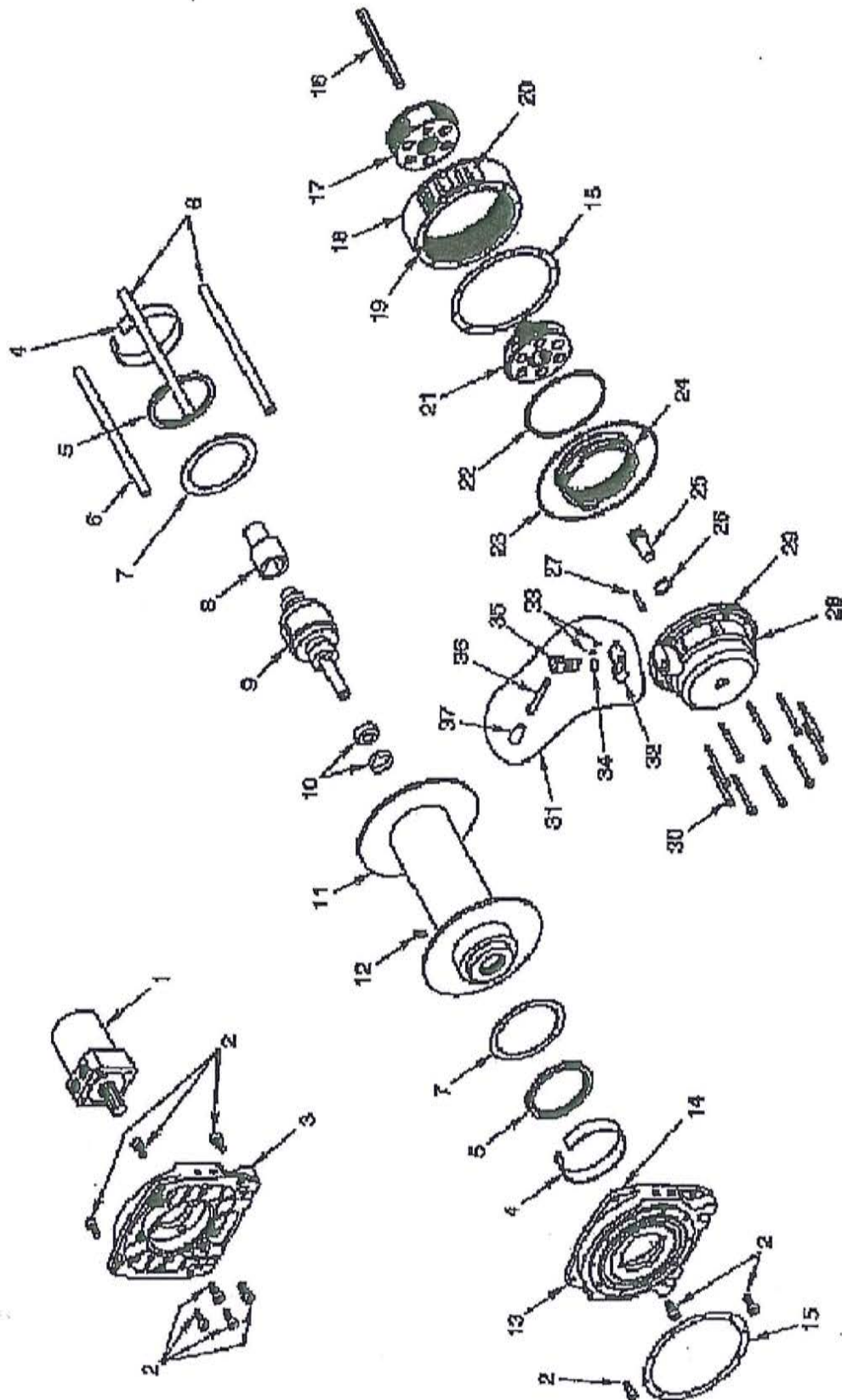
VIEW: Back Of Tractor



VIEW: Top Of Winch

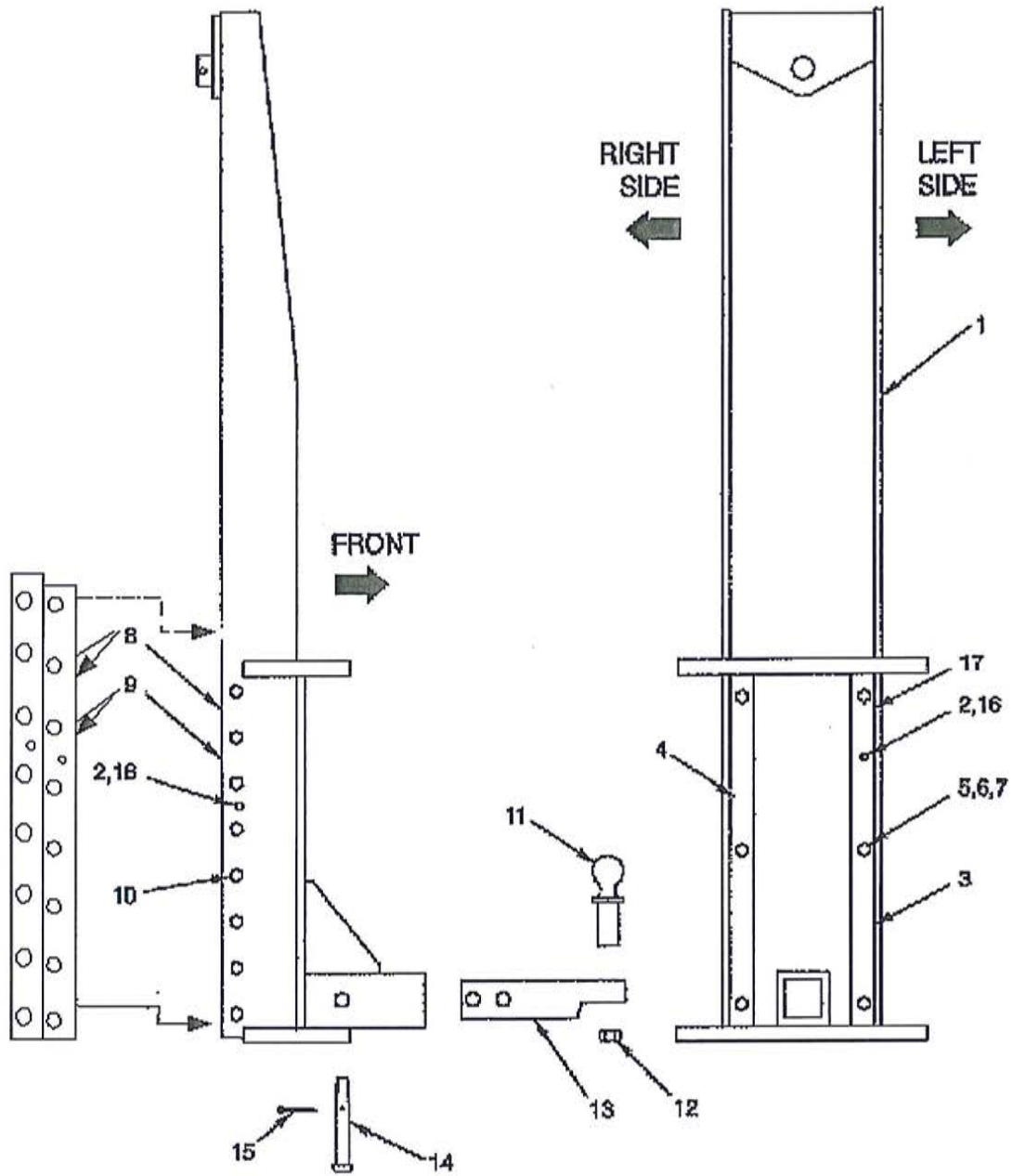
ITEM	NOTES	PART#	QTY	DESCRIPTION
1		7678	1	WINCH
2		5601063	2	FITTING
3		7151	12	CAPSCREW, HEX 12MM X 35MM
4		589072	12	FLATWASHER, 7/16" SAE

Winch Assembly



Item	Notes	Part#	Qty	Description
1		Call Layton Manufacturing Co. Service Department (503) 585-4888	1	Motor, Hydraulic
2			10	Capscrew, 3/8-16x3/4 SOC HD
3			1	S/P Drum Support Assembly, Hydraulic Motor End
4			2	Bushing, Drum Nylatron, CIM LG FRM
5			2	(Vins) Seal, Radial Oil
6			3	Tie Rod, Tapped, .625 Dia. X 10.580
7			2	Washer, Thrust, Nylatron, CIM LG FRM
8			1	Driver, Brake, Hydraulic Brake
9			1	S/P Disk Brake Assembly, CCW Hydraulic
10			1	S/P Bearing and Tolerance Ring
11			1	S/P Drum Assembly, STD
12			1	Screw, Set, Rope Anchor
13			1	S/P Drum Support Assembly, Geartrain End
14			1	Label, Drum Rotation
15			2	Gasket, Ring Gear
16			1	Hex Shaft, Drive, 1/2 x 6.257
17			1	Carrier Assembly, Stage 3, 4340 Planet
18			1	S/P Ring Gear Assembly, Series 12
19			1	Label, Warning Series Winches
20			1	Label, Nameplate, Series 12
21			1	(R/KB) Carrier Assembly, Stage 2
22			1	Retaining Ring, Locking Ends, Spiral
23			1	S/P Ball Set, 3/16, 85pc
24			1	Ring Gear, Clutch, M10
25			1	Gear, Sun, 15T
26			1	Thrust Plate, Fs Winch
27			1	Pin. Clutch Retainer
28			1	S/P Gear Housing Assembly, Series 12
29			1	Label, Clutch Engagement
30			10	Capscrew, 1/4-20x3 SOC HD, GR8
31			1	S/P Clutch Lever Assembly
32			1	Latch, Safety, Winch Clutch, .855 Dia.
33			2	(KB) 10-24x1/2 Type F, Phillip Pan Head
34			1	Seal, O-Ring, AS568-113
35			1	Clutch Shaft
36			1	Clutch Lever, CCW
37			1	Knob
38			1	Fairlead Roller Assembly (Not Shown)

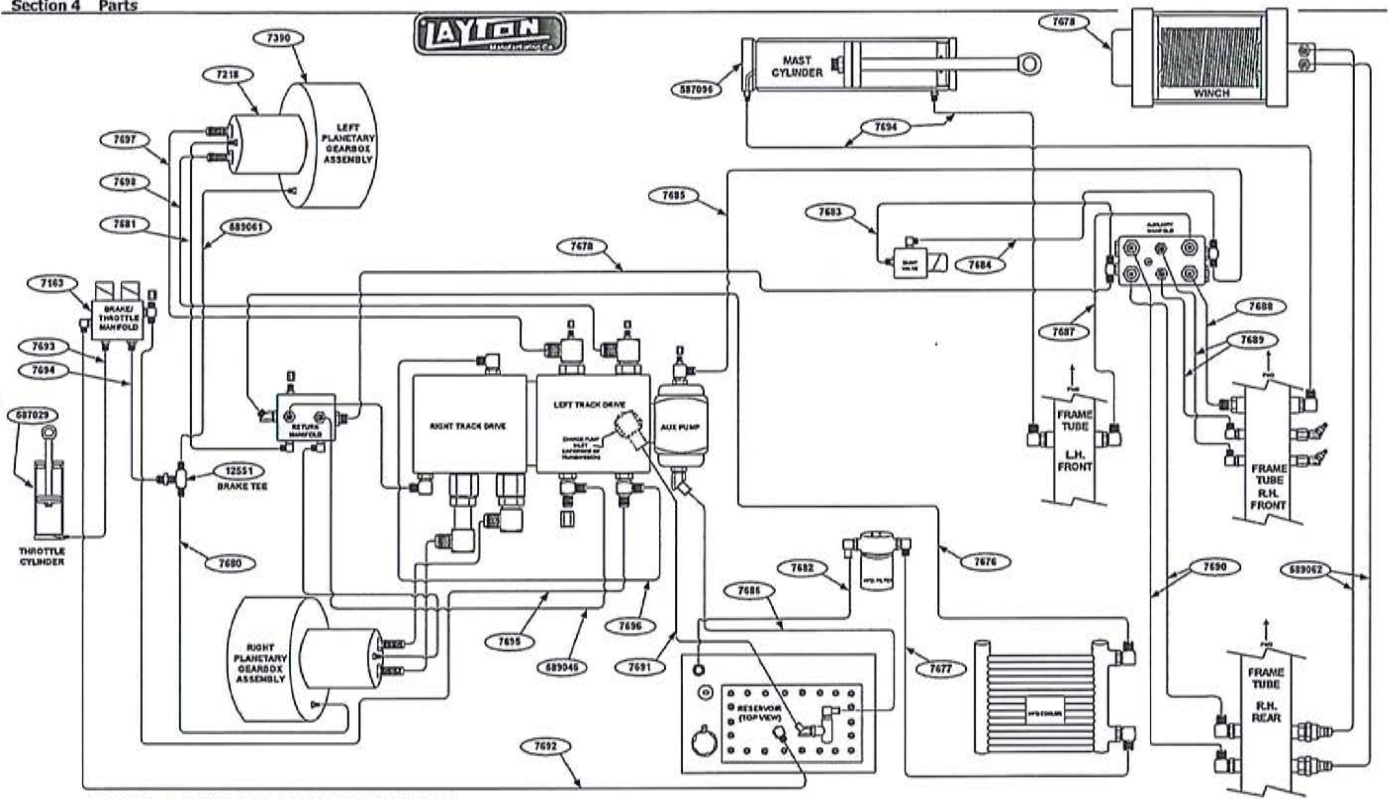
Mast Assembly



Mast Assembly

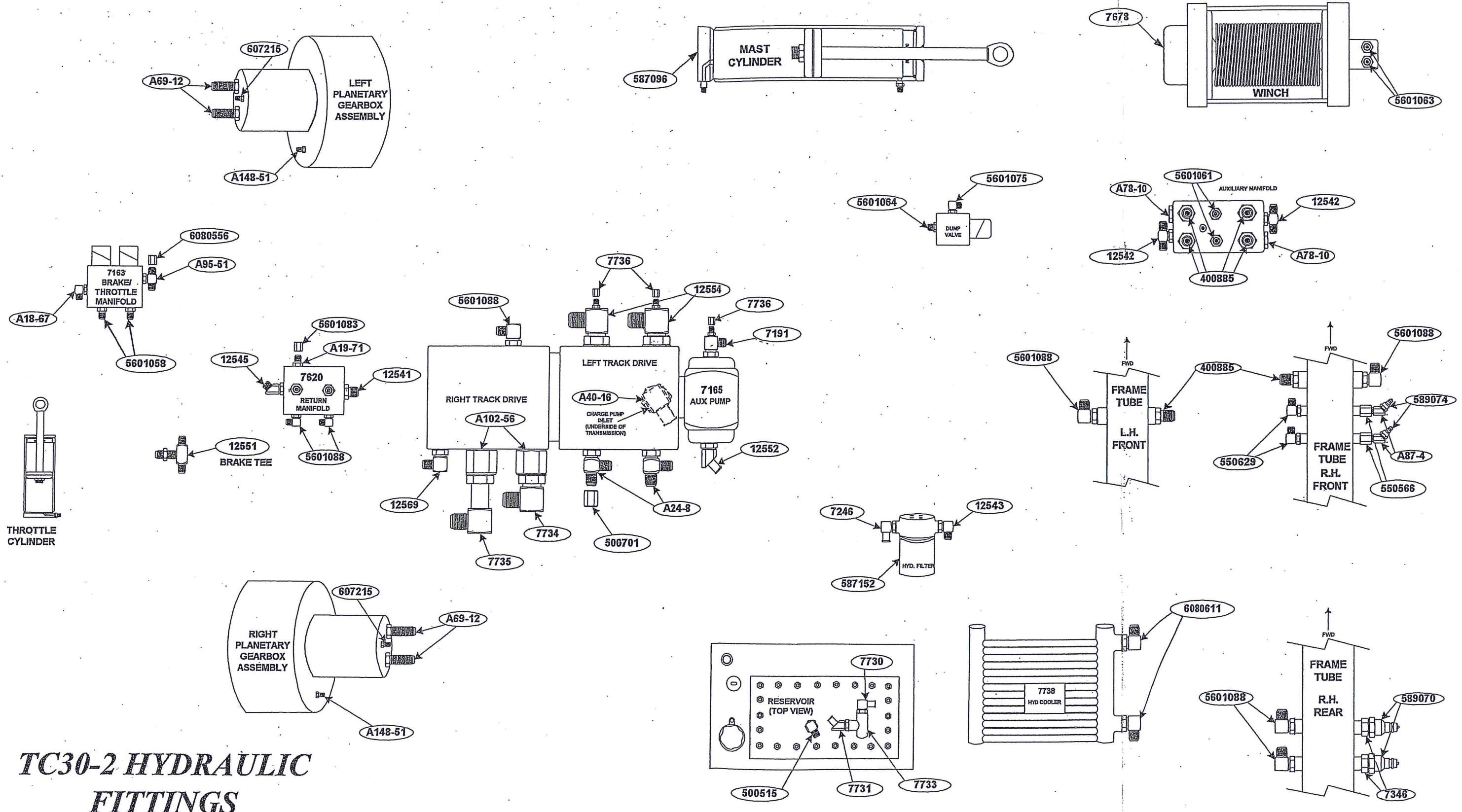
ITEM	NOTES	PART#	QTY	DESCRIPTION
		7572		MAST ASSEMBLY COMPLETE
1		7578	1	MAST
2		500176	4	LUBE FITTING
3		587027L	1	WEAR BAR
4		587027R	1	WEAR BAR
5		G13-508	6	BOLT, 1/2-13x2 FLHD
6		500058	6	LOCKWASHER, 1/2
7		607497	6	NUT, 1/2-13
8		587026L	1	GUIDE BAR
9		587026R	1	GUIDE BAR
10		587168	16	CAPSCREW, 5/8-11x1-1/2 GR8 HHCS
11		588051	1	BALL HITCH
12		587171	1	NUT, 1-3/8 NF
13		588152	1	HITCH
14		588151	1	PIN
15		588153	1	COTTER PIN
16		N10-012	4	O-RING, 01-012
17		7360	A/R	SHIM, MAST
18		400286	22	CAPSCREW
19		607054	1	CAPSCREW
20		500012	1	NUT
21		500056	1	WASHER
				SEE GROUP 2 (HYDRAULIC COMPONENTS) FOR MAST CYLINDER DETAIL

Section 4 Parts



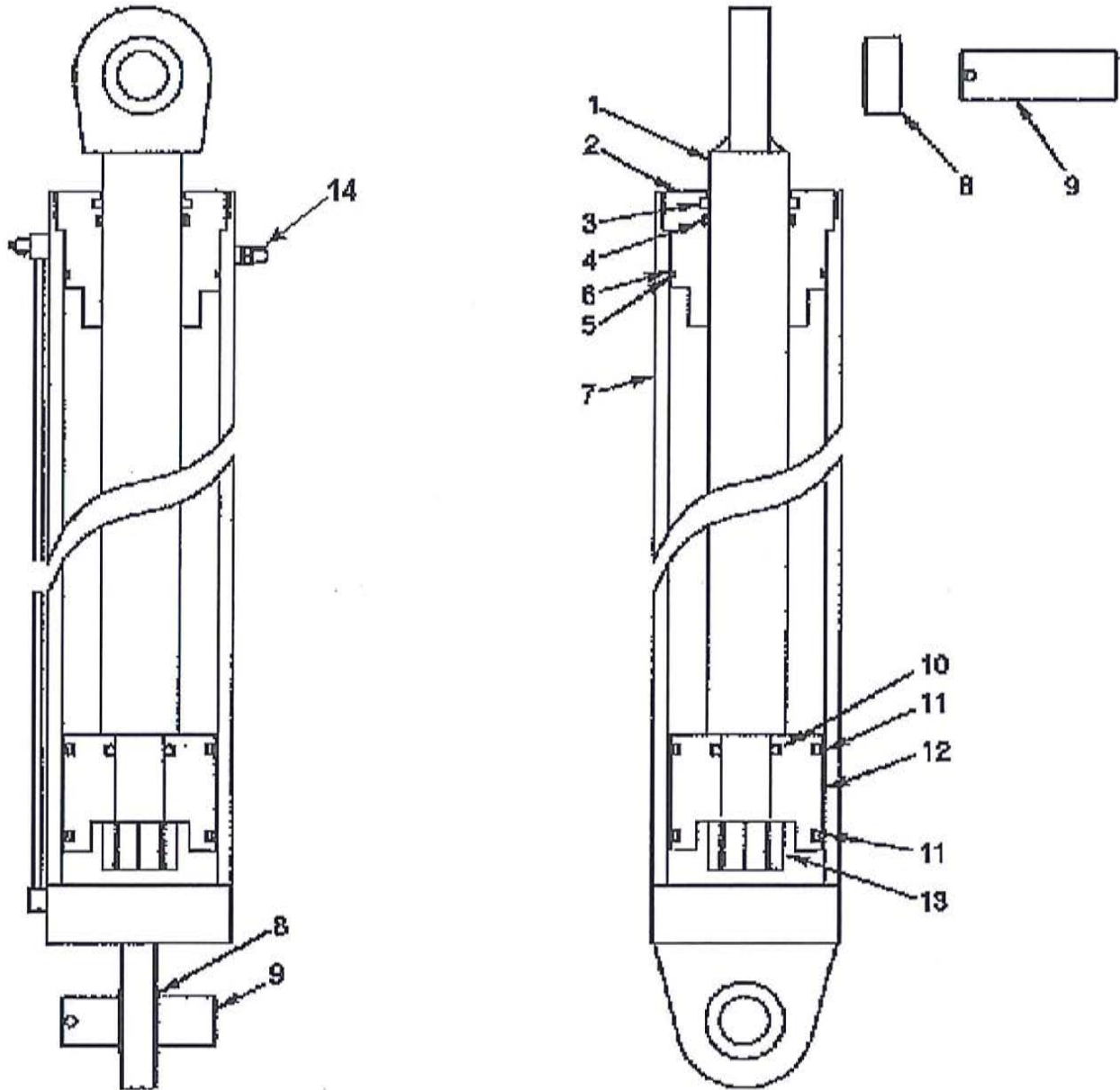
TC30-2 HYDRAULIC LINES

LAYTON MANUFACTURING COMPANY



TC30-2 HYDRAULIC FITTINGS

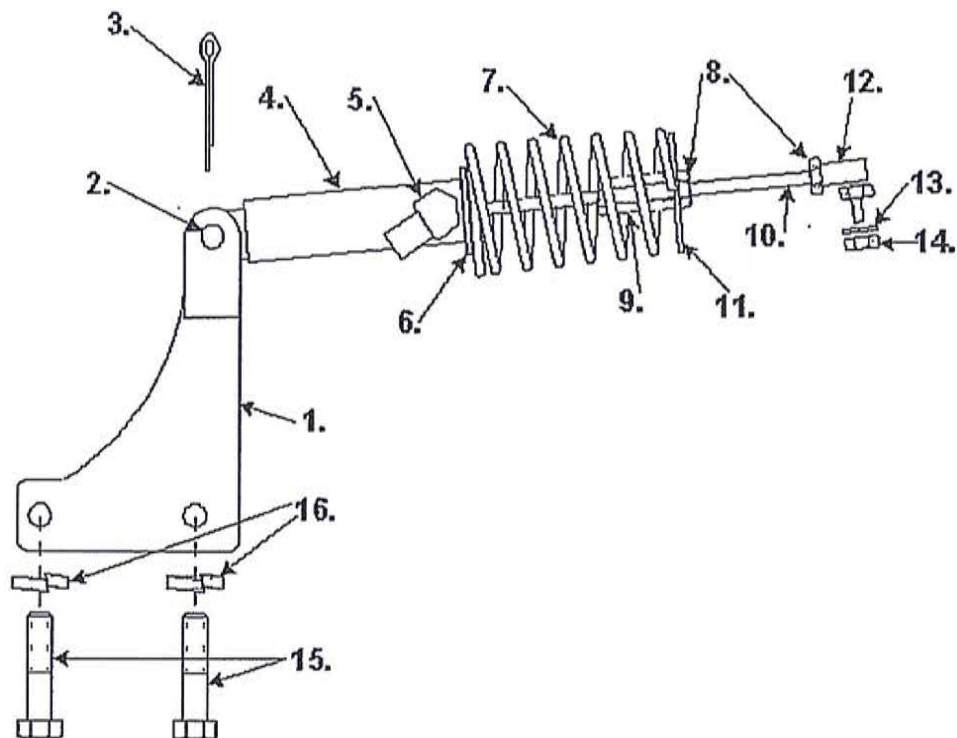
Mast Cylinder



MAST CYLINDER

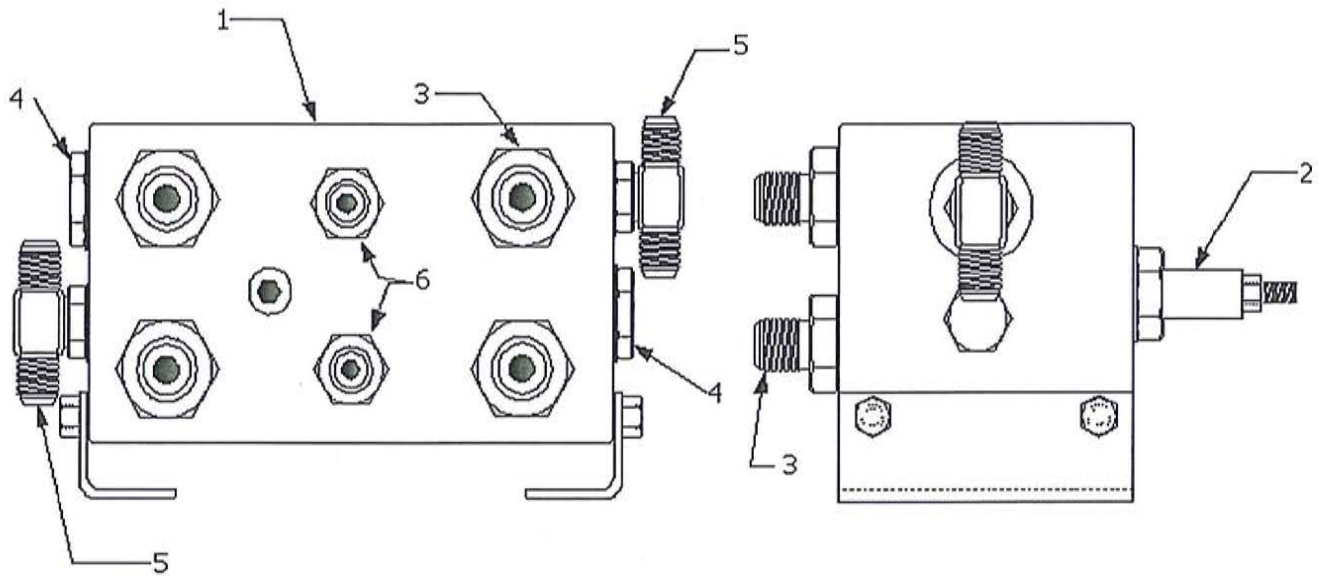
ITEM	NOTES	PART#	QTY	DESCRIPTION
		587096		LIFT CYLINDER
1		587095	1	PISTON ROD
2		587008	1	HEAD
3	*	585323	1	ROD WIPER
4	*	588104	1	SEAL
5	*	N10-342	1	O-RING, 2-344
6	*	7202	1	BACK-UP RING
7		587096	1	CYLINDER
8		T21-1	2	BEARING, 12SF-20
9		587100	1	PIN
10	*	N10-218	1	O-RING, 2-218
11	*	587110	2	SEAL
12		587007	1	PISTON
13		588121	1	NUT
14		550361		FITTING
		*7439		SEAL KIT, COMPLETE

THROTTLE ASSEMBLY



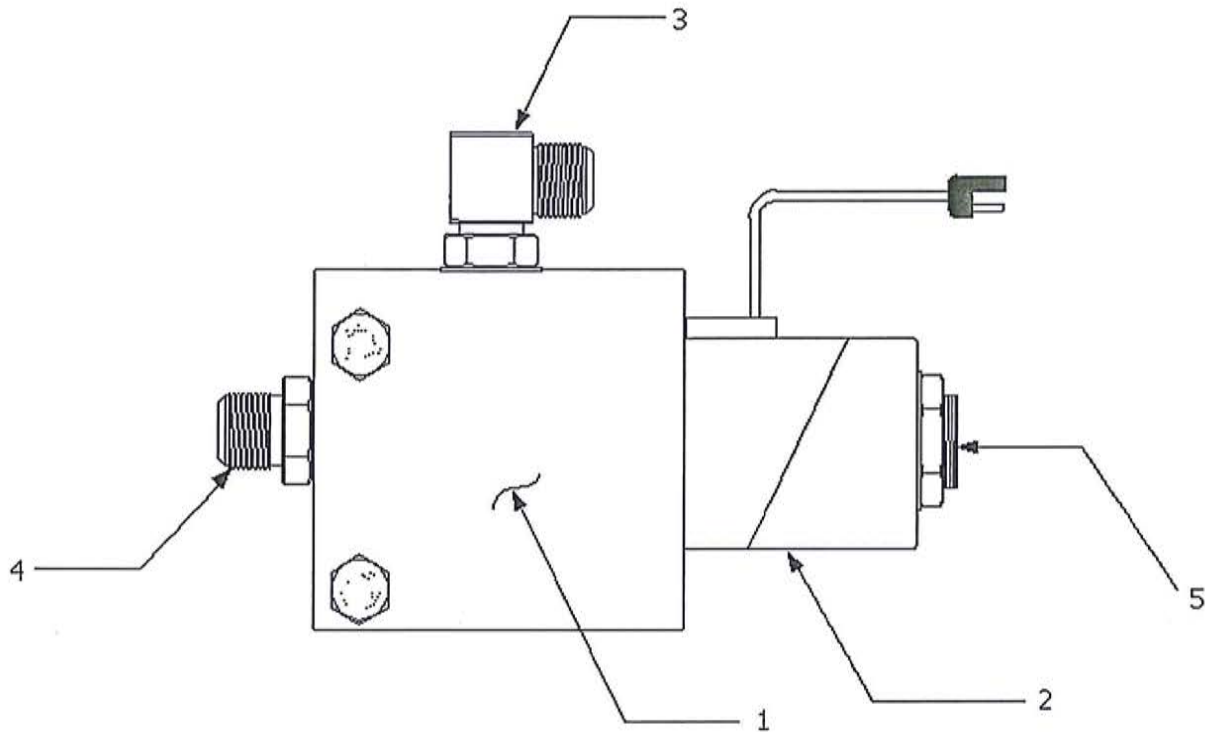
ITEM	NOTES	PART#	QTY	DESCRIPTION
1		7628	1	BRACKET
2		588097	1	PIN
3		500481	1	COTTER PIN
4		587029	1	CYLINDER
5		EI506-2-4	1	ADAPTER
6		500666	1	SAE WASHER, 5/8
7		587134	1	SPRING
8		5601636	3	JAM NUT, 1/4-28
9		588142	1	COUPLING NUT
10		587045	1	ROD
11		587035	1	WASHER
12		J14-4	1	JOINT
13		500071	1	LOCKWASHER, 1/4
14		588140	1	NUT, 1/4-28
15		588118	2	CAPSCREW, 8MM X 1.25 X 20
16		587157	2	LOCKWASHER, 8MM

Auxiliary Manifold Assembly



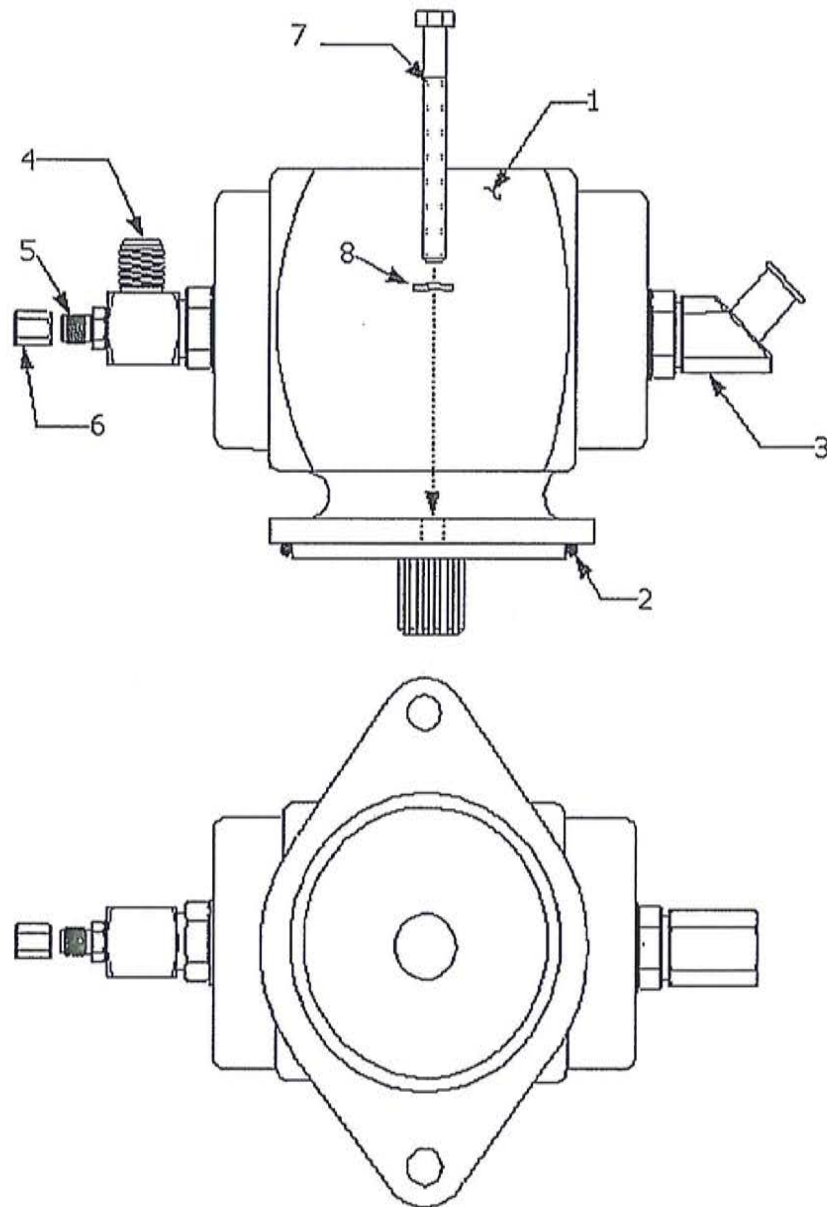
Ite m	Notes	Part#	Qty	Description
1		587091	1	Manifold
2		587136	1	Relief Valve
3		400885	4	Fitting
4		A78-10	2	Fitting
5		12542	2	Fitting
6		5601061	2	Fitting

Dump Valve Assembly



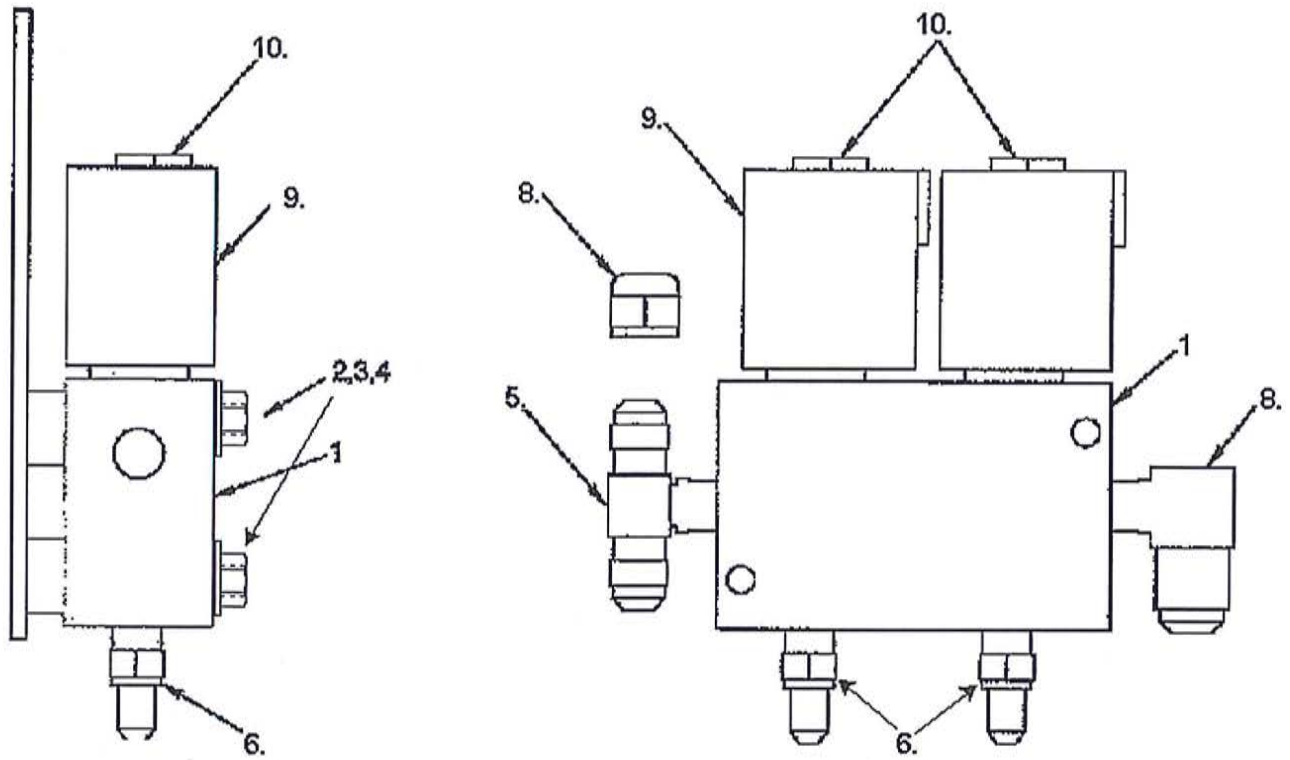
ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
		7596		DUMP VALVE ASSEMBLY
1.		588031-2	1	Valve Body
2.		8057	1	Coil Assembly
3.		5601075	1	Fitting
4.		5601064	1	Fitting
5.		588031-1	1	Cartridge

AUXILIARY PUMP ASSEMBLY



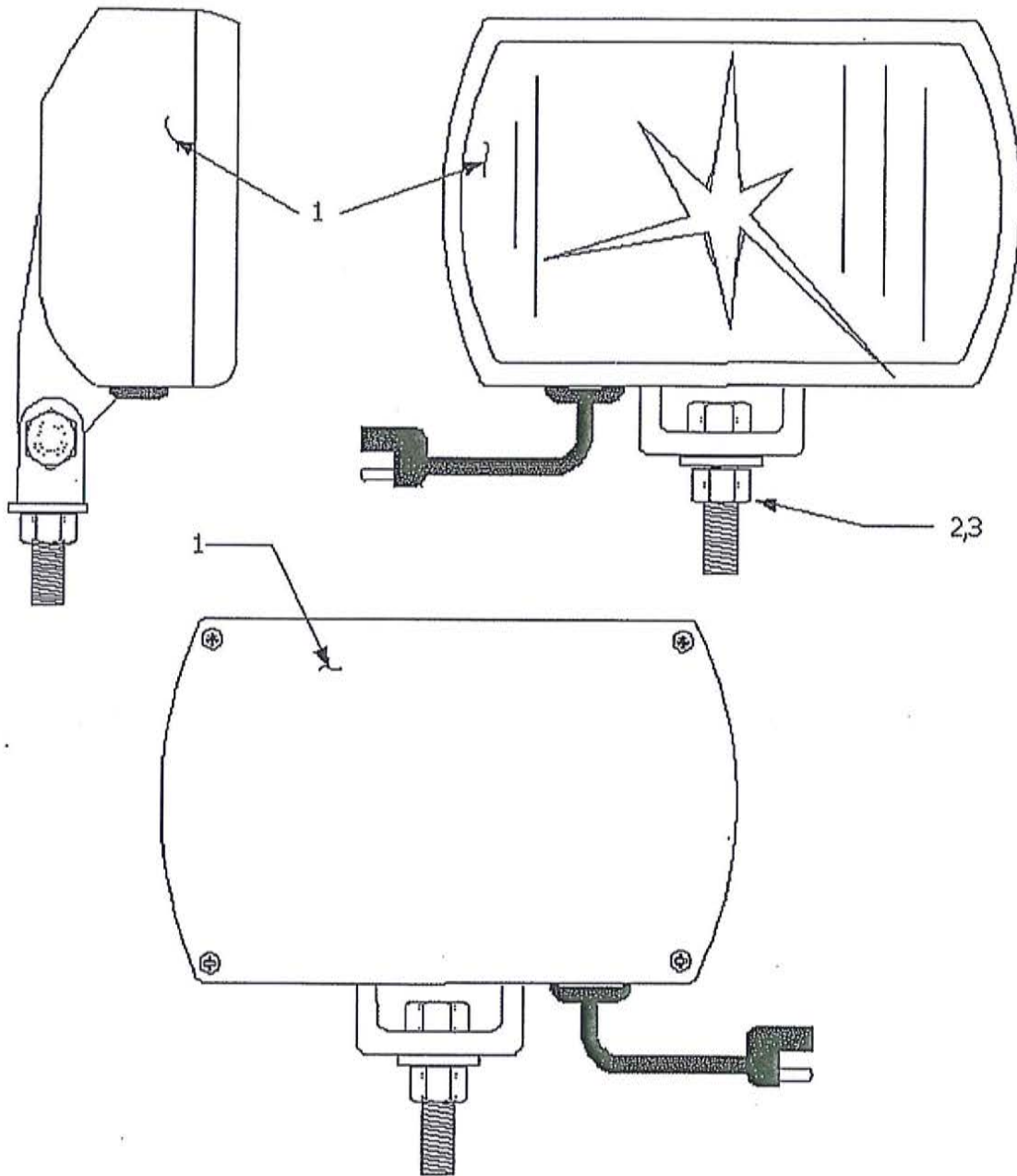
ITEM	NOTES	PART#	QTY	DESCRIPTION
1		589053	1	PUMP
2		12612	1	O-RING
3		12522	1	FITTING
4		7191	1	FITTING
5		5601058	1	FITTING
6		7736	1	CAP
7		7318	2	SCREW
8		500056	2	WASHER

Throttle & Brake Manifold



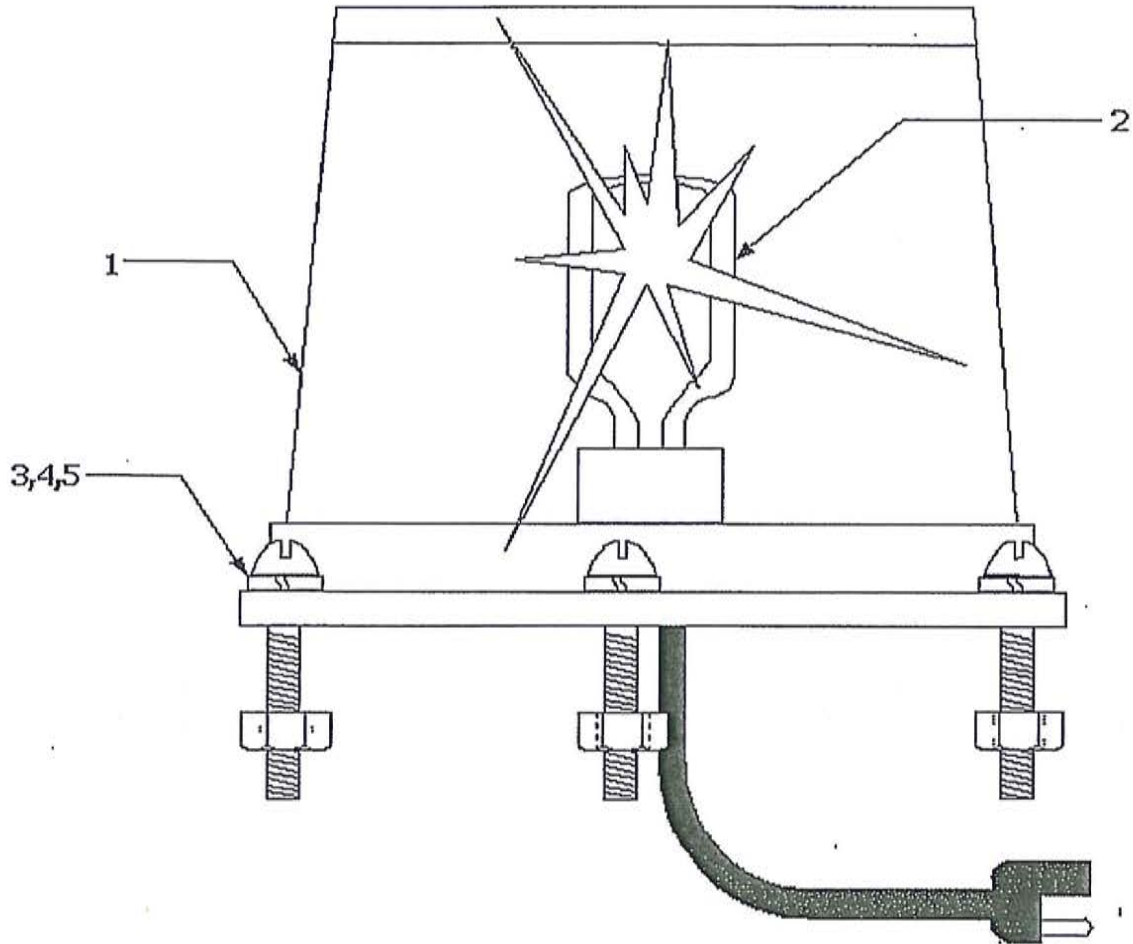
Ite m	Notes	Part#	Qty	Description
1		589053	1	Pump
2		12612	1	O-Ring
3		12522	1	Fitting
4		7191	1	Fitting
5		5601058	1	Fitting
6		7736	1	Cap
7		7318	2	Screw
8		500056	2	Washer

LIGHT ASSEMBLY



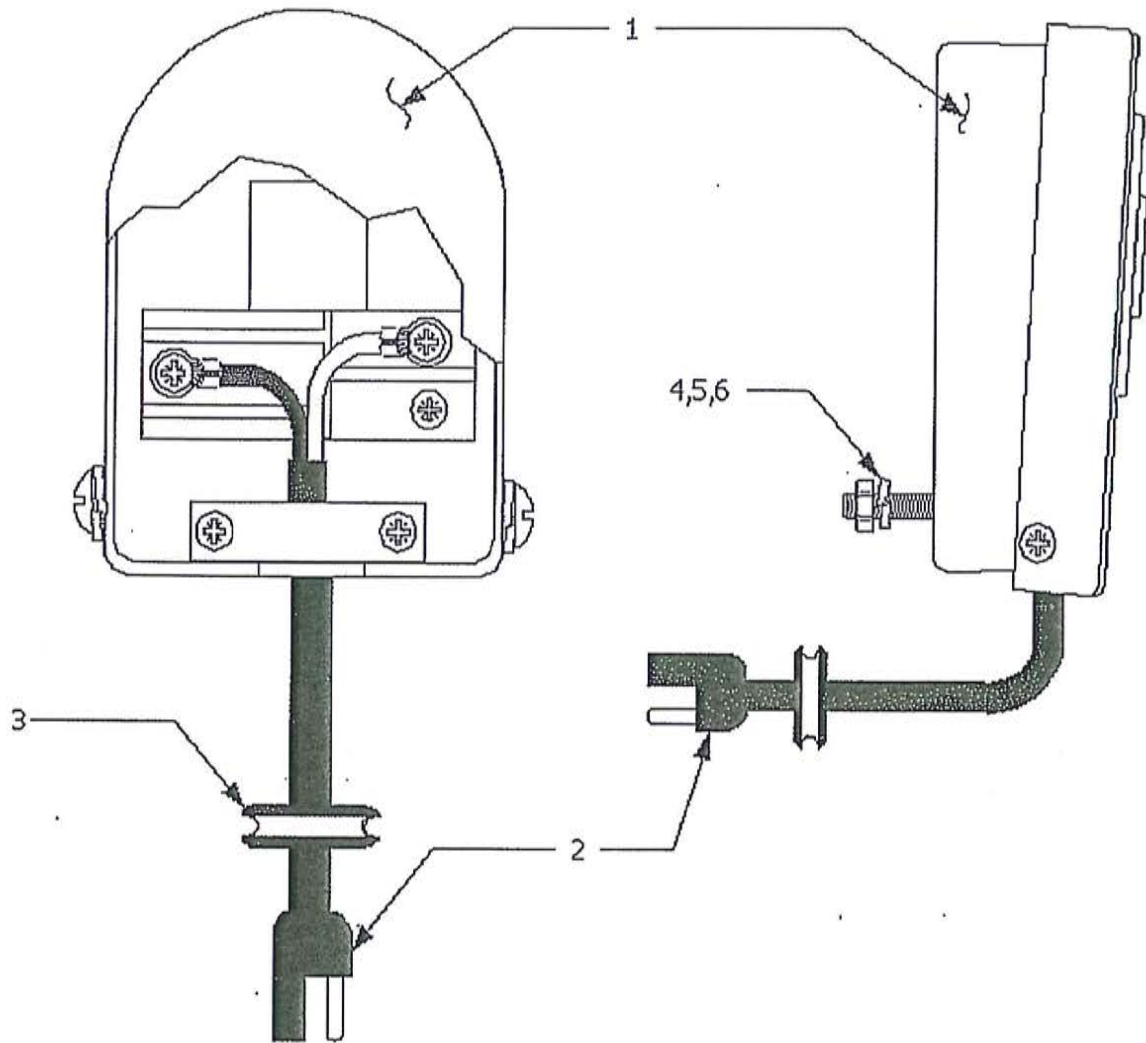
ITEM	NOTES	PART#	QTY	DESCRIPTION
		7609		ASSEMBLY, LIGHT
1		7616	1	LIGHT
2		500071	1	NUT
3		500070	1	WASHER

STROBE LIGHT ASSEMBLY



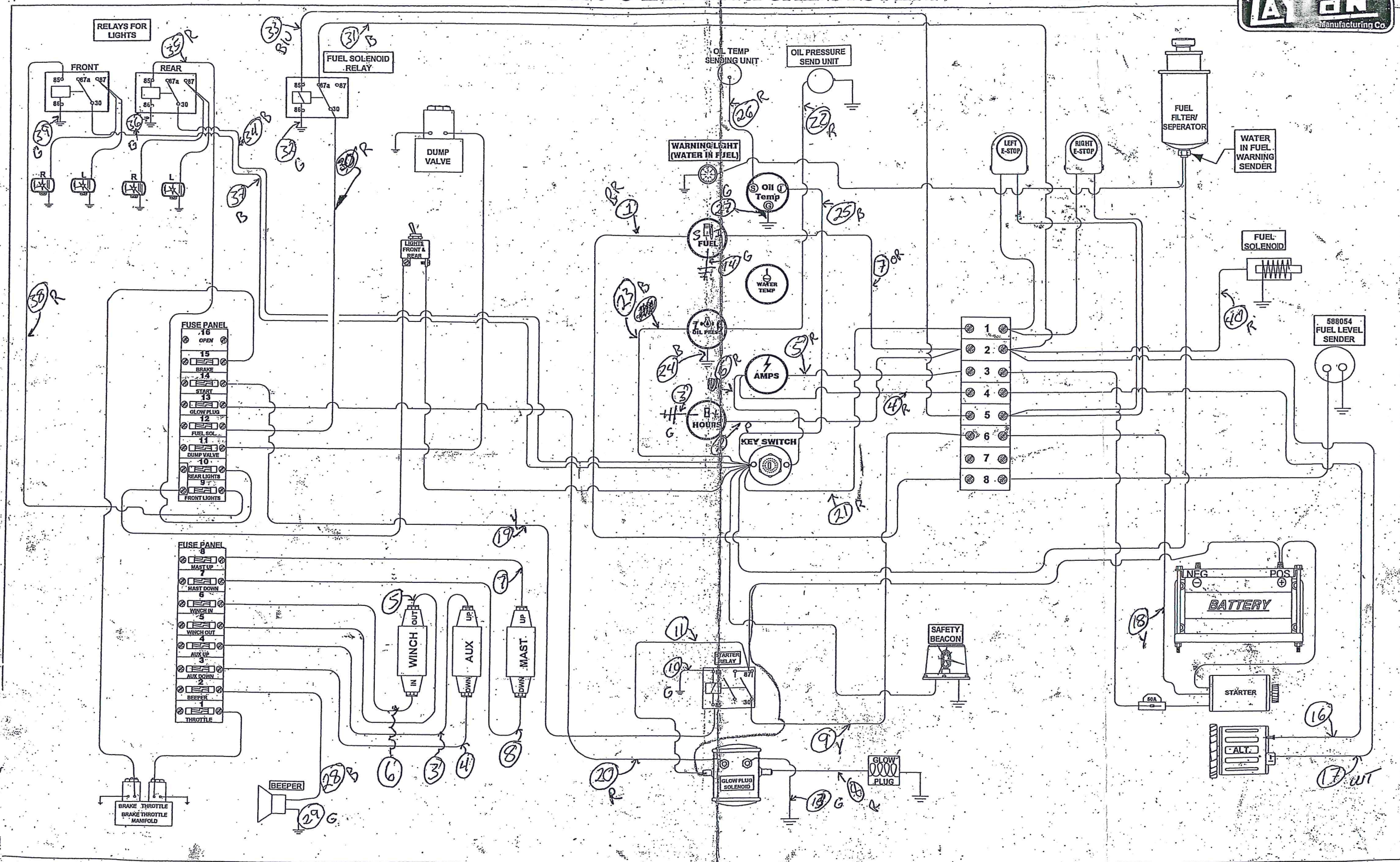
ITEM	NOTES	PART#	QTY	DESCRIPTION
		7814		STROBE LIGHT ASSEMBLY
1		587135	1	STROBE LIGHT
2		7144	1	BULB (FOR REPLACEMENT)
3		10608	6	SCREW
4		606939	6	NUT
5		607630	6	WASHER

EMERGENCY STOP SWITCH



ITEM	NOTES	PART#	QTY	DESCRIPTION
		7814		STROBE LIGHT ASSEMBLY
1		587050	1	E-STOP SWITCH
2		8059	1	WIRING ASSEMBLY
3		UI0-13	1	GROMMET
4		500136	2	SCREW
5		606631	2	NUT
6		607630	2	LOCKWASHER

TC30-3 ELECTRICAL SYSTEM



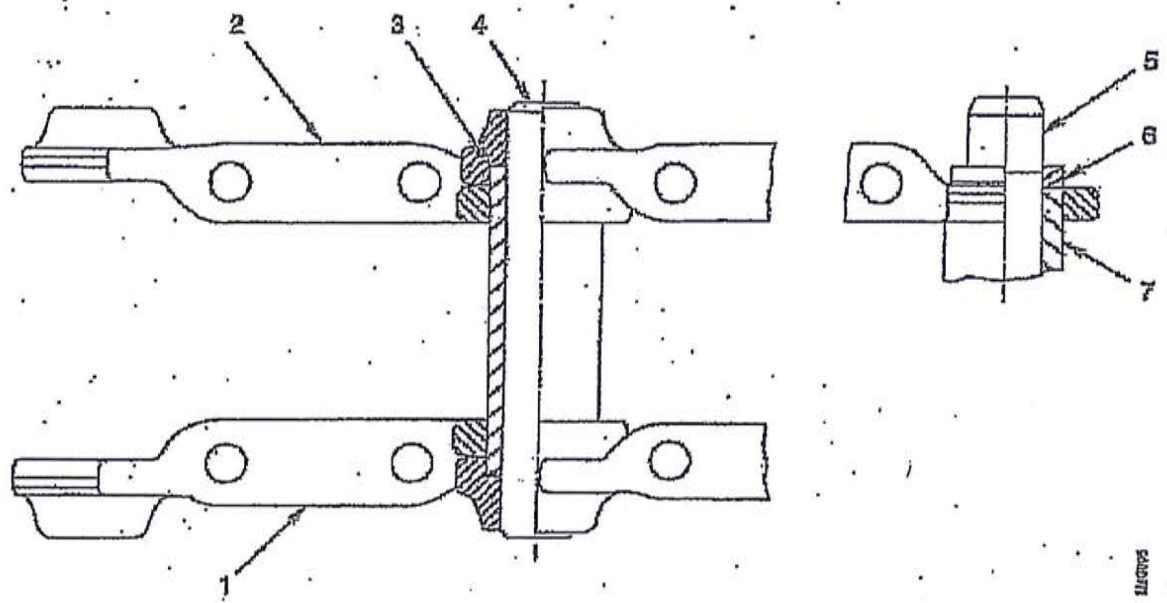


ELECTRICAL SYSTEM - Wire Dimensions

<u>Wire #</u>	<u>Description</u>	<u>Length</u>	<u>Wire #</u>	<u>Description</u>	<u>Length</u>
1)	14 Gage Brown.....	13- 1/2"	15)	14 Gage Green	14-1/2"
2)	14 Gage Black.....	8-5/8"	16)	10 Gage Red	68-1/4"
3)	14 Gage Black.....	3-3/4"	17)	14 Gage White.....	68-1/2"
4)	10 Gage Red	10"	18)	12 Gage Yellow.....	54-3/4"
5)	8 Gage Red	9-1/2"	19)	14 Gage Yellow.....	23-1/2"
6)	10 Gage Red.....	5"	20)	14 Gage Red	19"
7)	14 Gage Orange.....	10"	21)	14 Gage Red	12"
8)	12 Gage Red	19-1/2"	22)	14 Gage Red	29"
9)	12 Gage Yellow	5"	23)	14 Gage Black.....	8-1/8"
10)	14 Gage Green.....	15-1/2"	24)	14 Gage Green	2-3/4"
11)	12 Gage Red	5"	25)	14 Gage Black.....	16"
12)	12 Gage Red	5-3/4"	26)	14 Gage Red	39-1/2"
13)	14 Gage Green.....	13"	27)	14 Gage Green.....	11"
14)	14 Gage Green.....	7-1/4"			



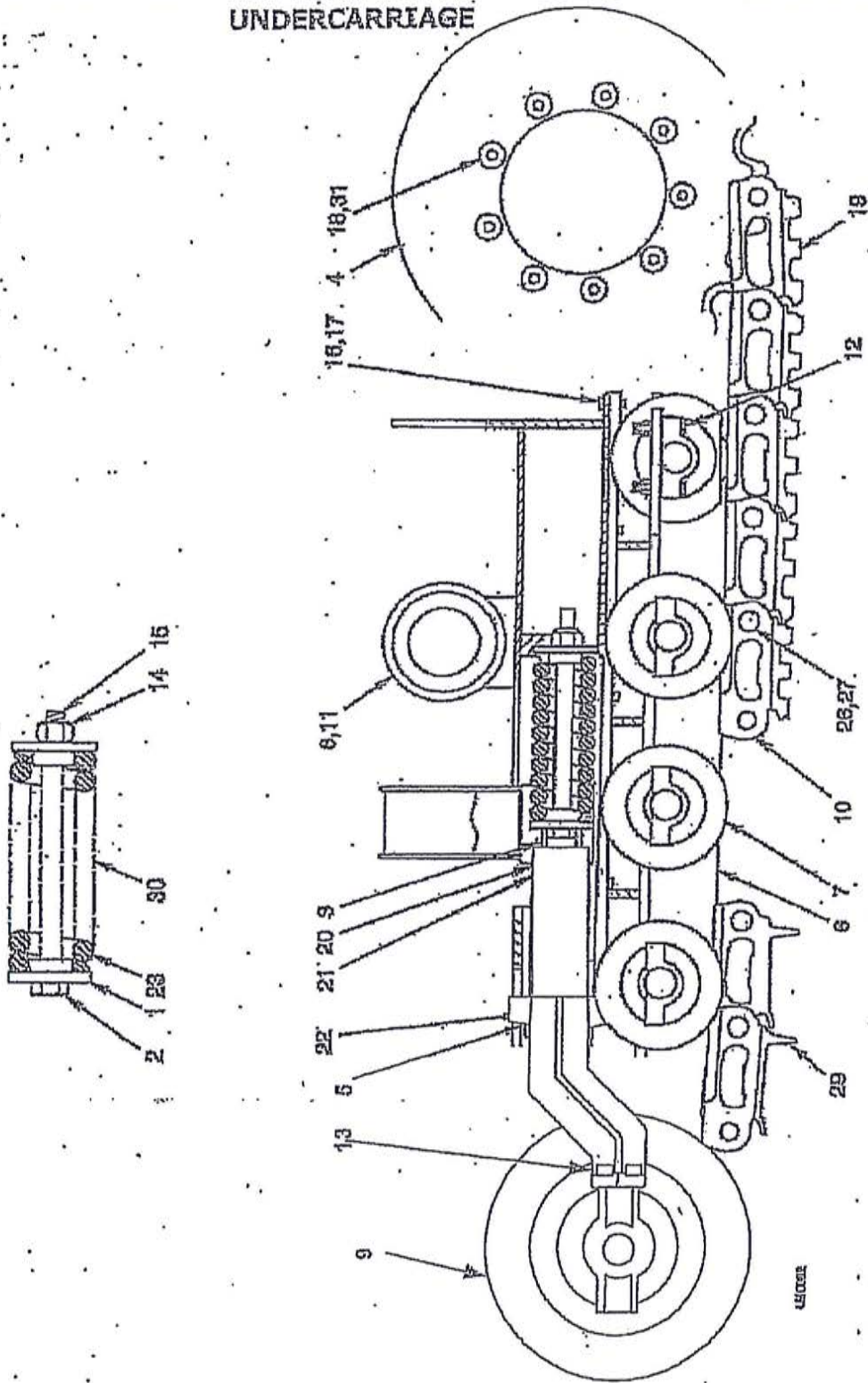
TRACK CHAIN ASSEMBLY



ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
		585298		Track Chain Assembly
1		585335	32	Link L.H.
2		585336	32	Link R.H.
3		585337	31	Bushing
4		585338	31	Pin
5		585339	1	Master Pin
6		585340	2	Spacer
7		585341	1	Master Bushing



UNDERCARRIAGE



Section 4 Parts

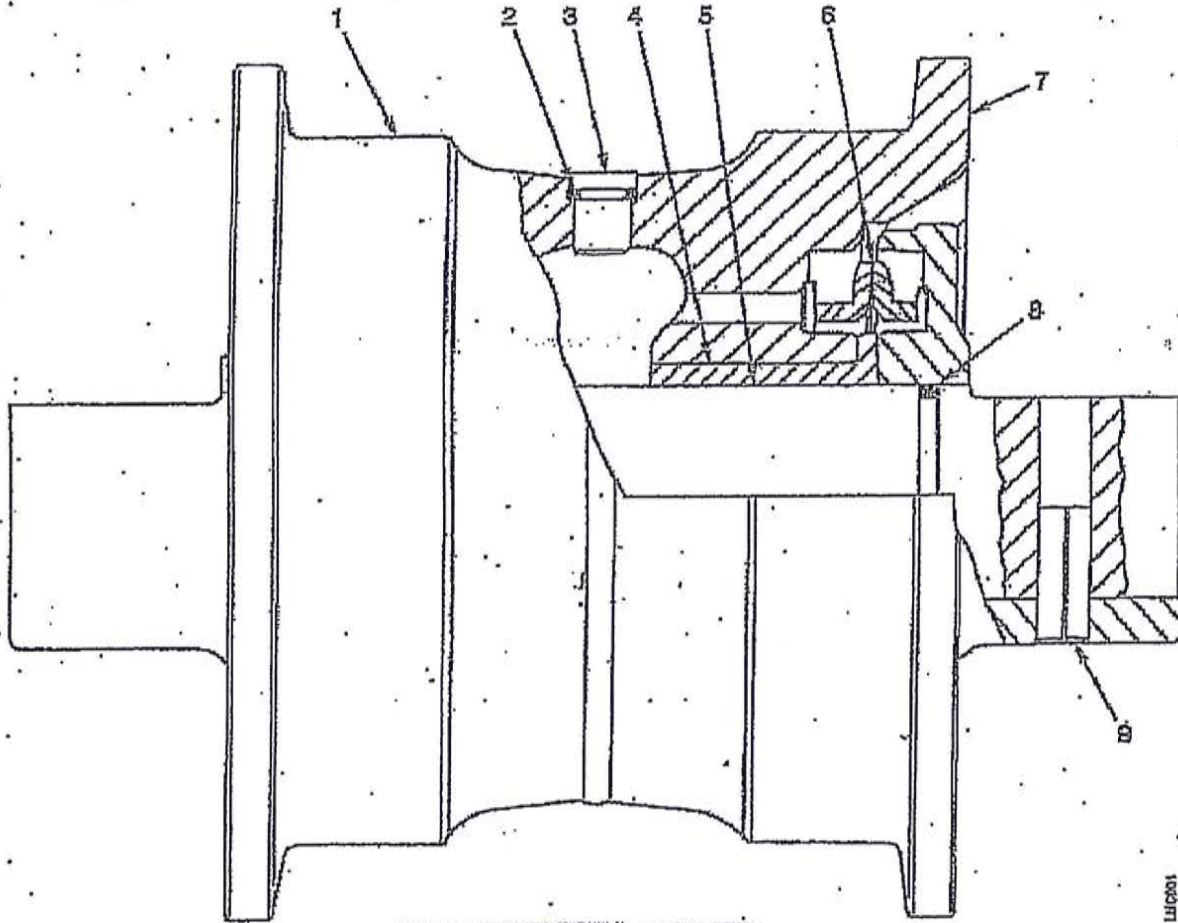


UNDERCARRIAGE

ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
1.		580735	4	Guide
2.		580736	2	Bolt
3.		587098	2	Piston
4.		7371	2	Sprocket
5.		580753	2	Yoke
6.		589133	2	Track Frame
7.		585295	10	Roller
8.		7396	2	Top Roller
9.		589137-2	2	Idler
10.		7359	2	Track Assembly, 32 Pitch Triple Grouser
11.		588105	4	Allen Head Capscrew
12.		587166	40	Capscrew
13.		588106	8	Allen Head Capscrew
14.		580762	2	Nut, Castle
15.		500264	2	Cotter Key
16.		589068	28	Capscrew
17.		589072	28	Washer
18.		7353	32	Capscrew
19.		585302	64	Triple Grouser
20.		585323	2	Rod Wiper
21.		588104	2	Seal
22.		12540	2	Grease Fitting
23.		585322	2	Spring
26.		585340	4	Spacer
27.		585339	2	Master Pin
29.		588061		Single Grouser 450mm (Optional)
		585303		Single Grouser 280mm (Optional)
30.		7352	2	Spring Assembly
31.		7203	32	Wedge Washer



BOTTOM ROLLER ASSEMBLY

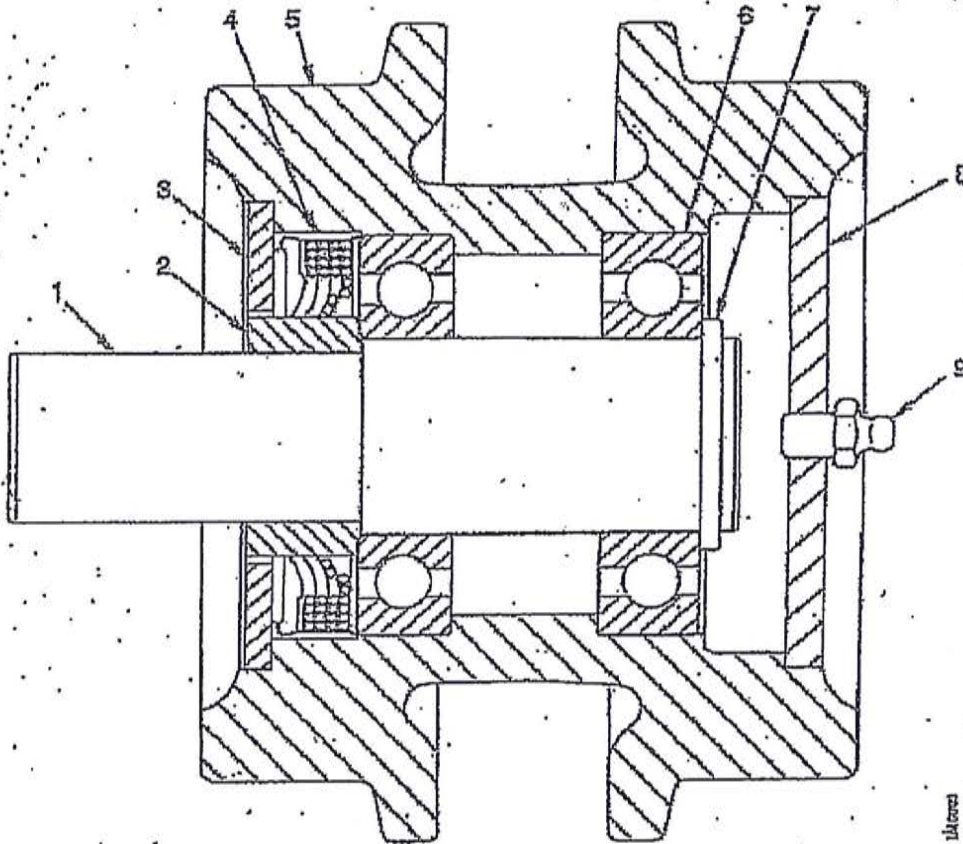


SERVICE NOTE
Specify Serial Number -
When Ordering

ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
1		585295		Bottom Roller Assembly
2		585304	1	Roller Shell
3		585305	1	O-ring
4		585306	1	Plug
5		585307	2	Bushing ...
6		585308	1	Shaft
7		585309	2	Seal Group
8		585310	2	Bracket
9		585311	2	Seal Wiper
		585312	2	Roll Pin



TOP ROLLER ASSEMBLY

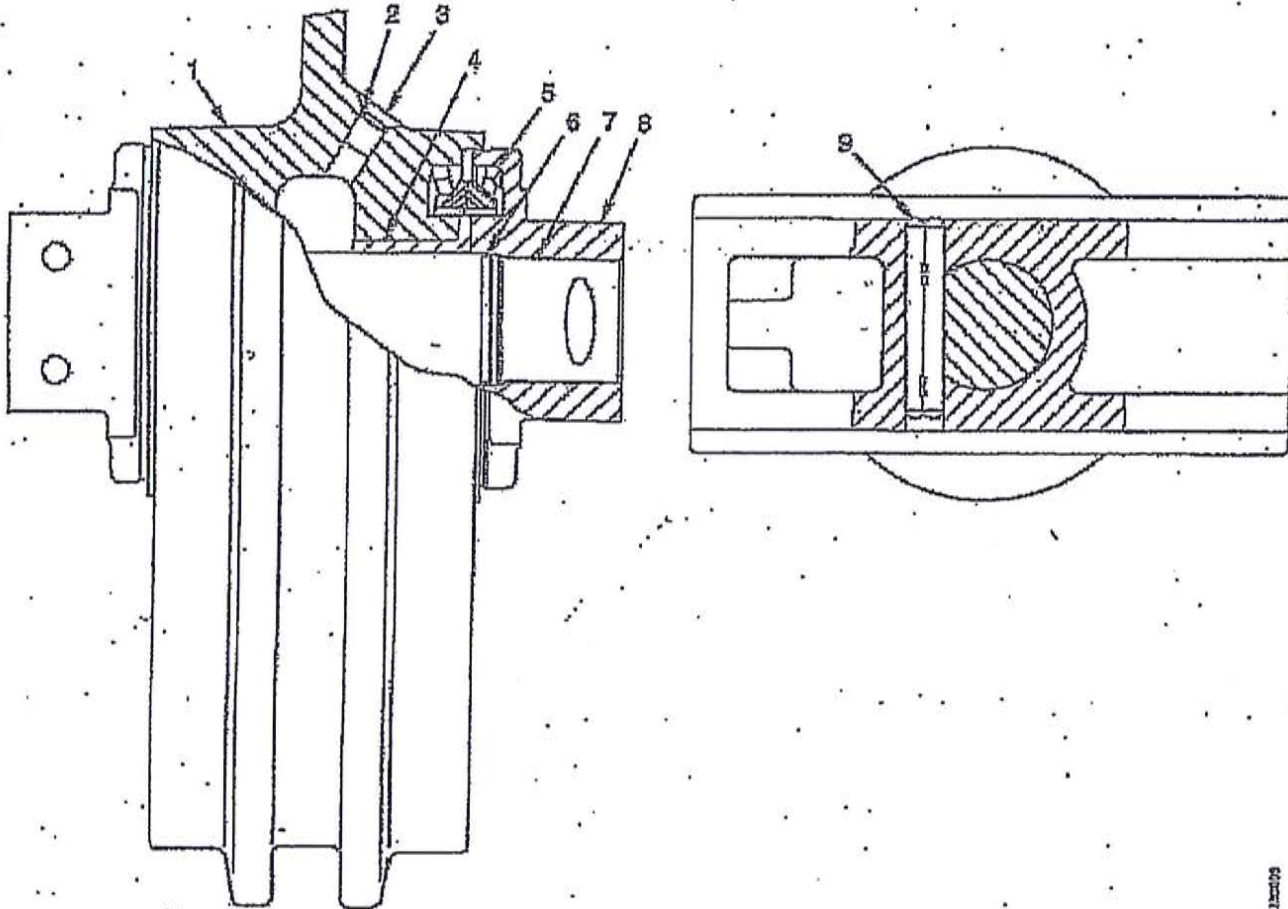


11/10/00

ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
		585296		Top Roller Assembly
1		585326	1	Shaft
2		585327	1	Spacer
3		585328	1	Lockwasher
4		585329	1	Oil Seal
5		585330	1	Roller Shell
8		585331	2	Ball Bearing
7		585332	1	Snap Ring
6		585333	1	Cap
9		585334	1	Grease Fitting

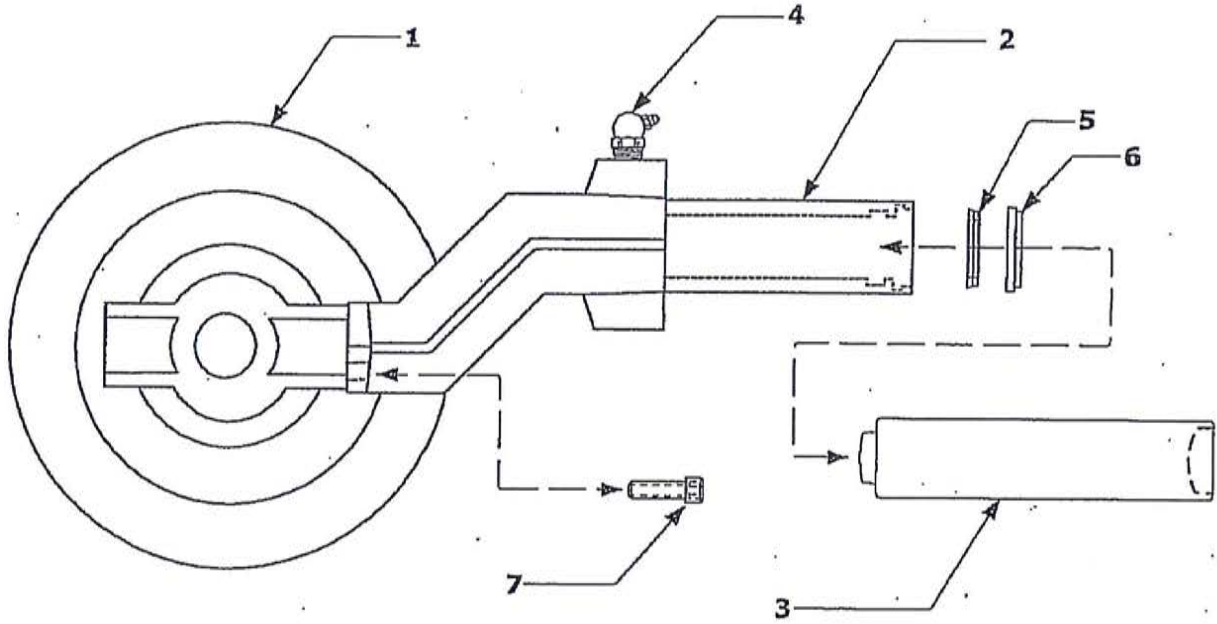


IDLER ASSEMBLY



ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
1		585287	1	Idler Assembly
		589010	1	Idler (Standard)
		589137-2	1	Idler (Slope Track)
2		585305	1	O-ring
3		585306	1	Plug
4		585313	2	Bushing
5		585314	2	Seal Group
6		585315	2	Seal Wiper
7		585316	1	Shaft
8		585317	2	Bracket
9		585318	2	Roll Pin

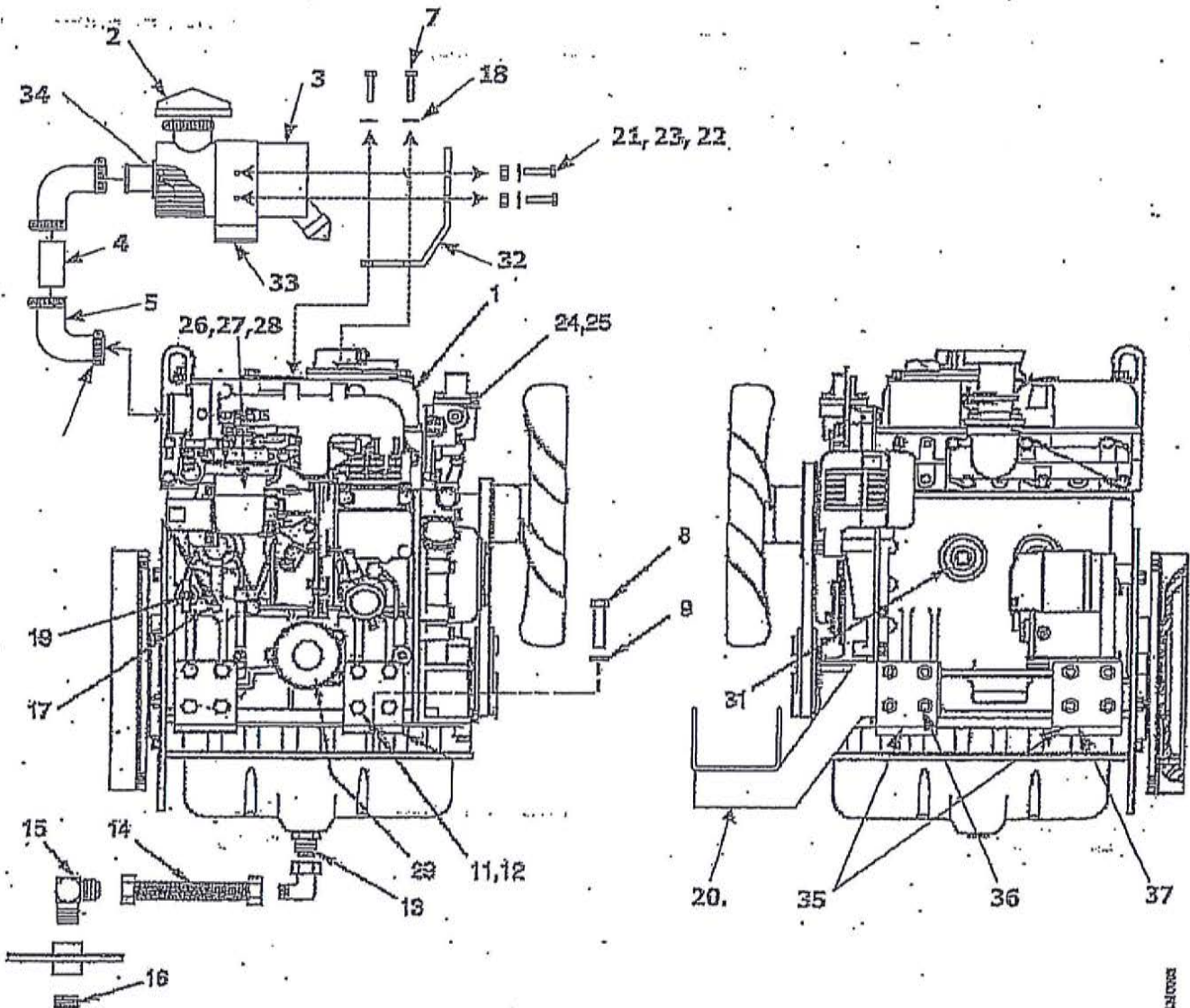
Section 4 Parts



ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
1.		585297	1	Idler Assembly
2.		580753	1	Track Adjuster Yoke
3.		587098	1	Track Adjuster Piston
4.		12540	1	Grease Fitting
5.		588104	1	Seal
6.		585323	1	Rod Wiper
7.		588106	4	Socket Head Capscrew



ENGINE ASSEMBLY



Section 4 Parts

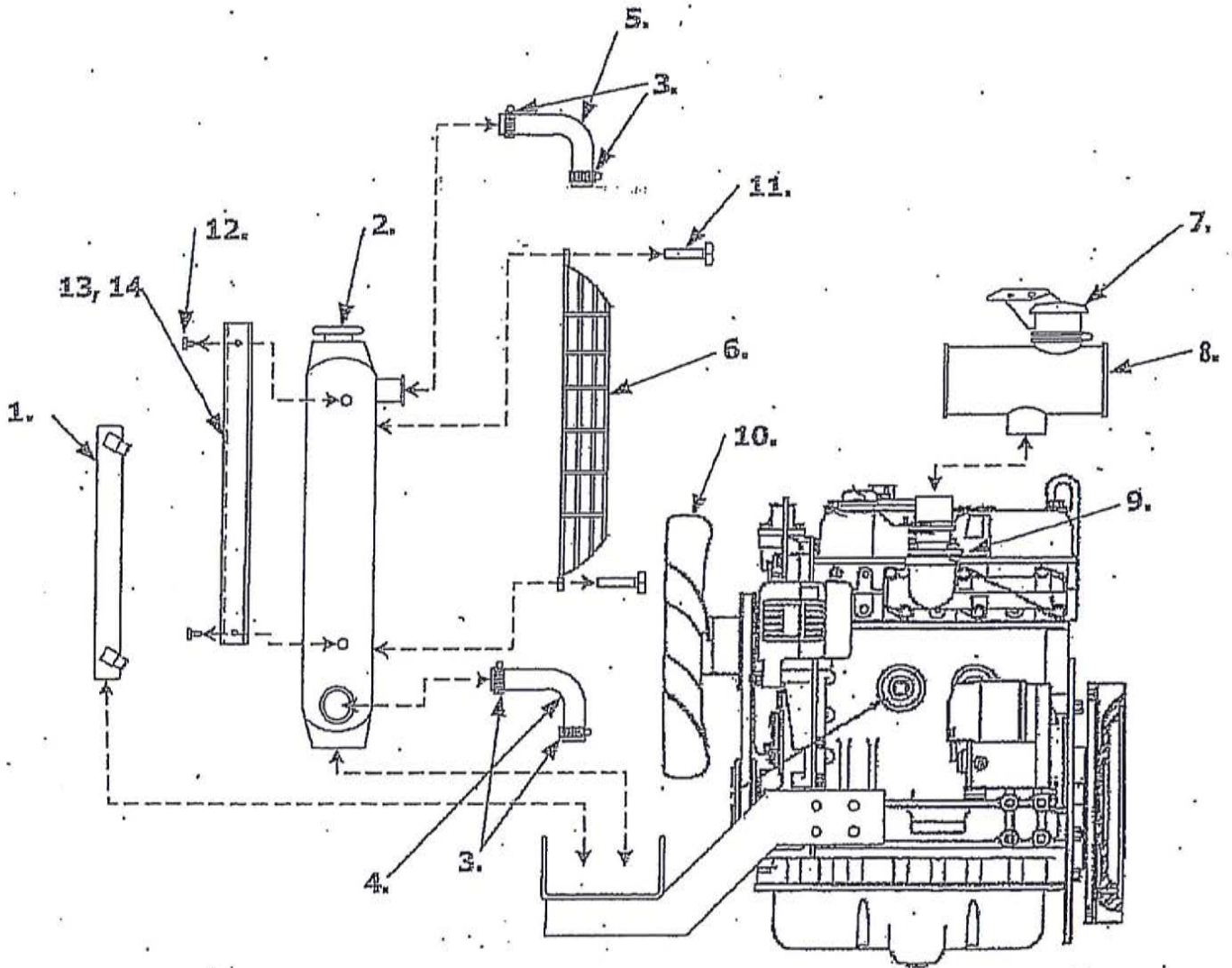


ENGINE ASSEMBLY

ITEM	NOTES	PART NUMBER	QTY	
1.		7599	1	Engine Kit (Eng, Radiator, Muffler Fan)
2.		7740	1	Hood Inlet
3.		7741	1	Air Cleaner
4.		580237	1	Tube, Coupler
5.		588100	2	Rubber Elbow
6.		588099	5	Clamp
7.		588118	4	Capscrew
8.		607175	4	Capscrew
9.		500275	4	Lockwasher
10.		7558	4	Mount
11.		7383	16	Lockwasher
12.		588190	16	Capscrew
13.		A145-12	1	Adapter
14.		7762	1	Hose Assembly
15.		607336	1	Adapter
16.		587163	1	Plug
17.		E1506-2-4	1	Adapter
18.		5601696	4	Lockwasher
19.		R11-4	1	Drain Cock
20.		7584	1	Radiator Support
21.		335	2	Capscrew
22.		500446	2	Nut
23.		500447	2	Lockwasher
24.		587052	1	Adapter
25.		587181	1	Washer
26.		588202	1	Filter Element
27.		588203	1	O-Ring
28.		588204	1	Cup
29.		588201	1	Filter, Oil
31.		7350	1	Block Heater (Optional)
32.		7630	1	Bracket, Air Cleaner
33.		7739	1	Mounting Band
34.		8044	1	Element
35.		7558	4	Engine Mount Bracket
36.		8055	8	Capscrew
37.		588190	8	Capscrew



MUFFLER, RADIATOR AND COOLER ASSEMBLY



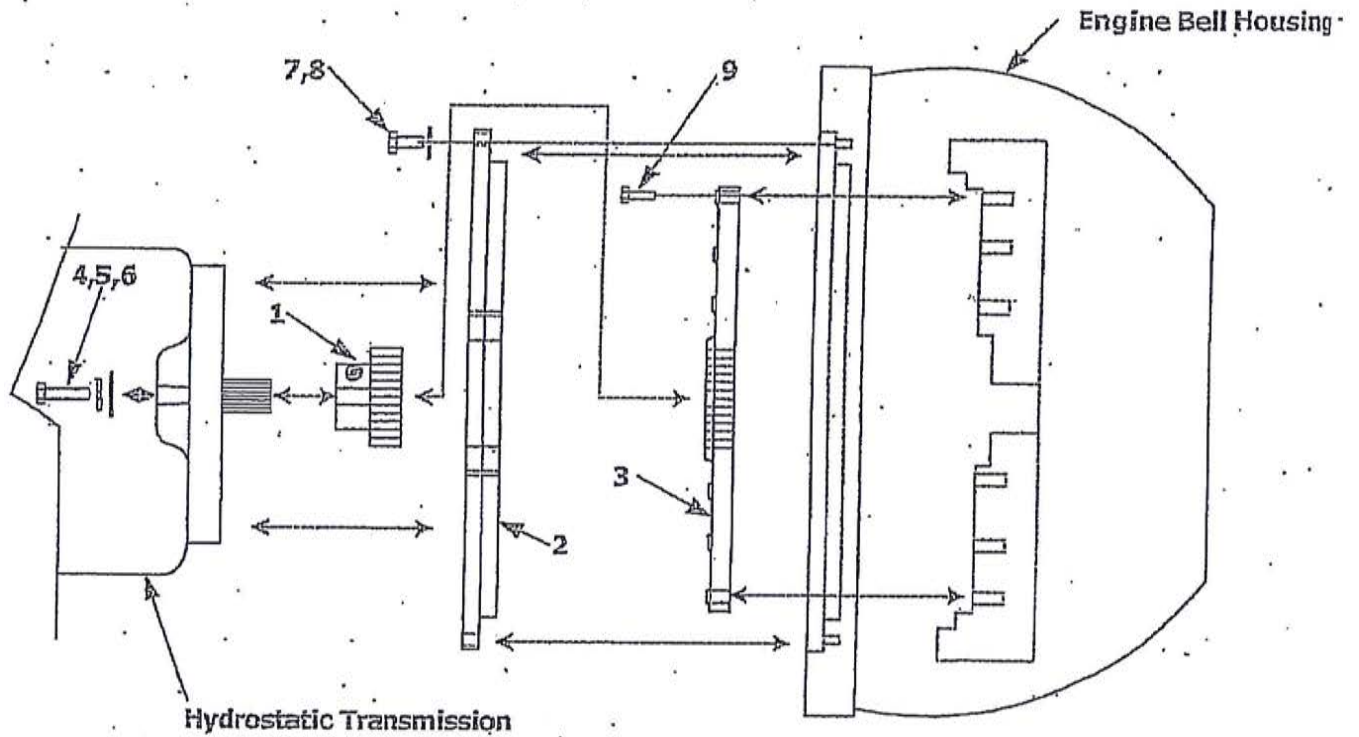


MUFFLER, RADIATOR AND COOLER

ITEM	NOTES	PART NUMBER	QTY	
1.		7738	1	Oil Cooler
2.		7600	1	Radiator
3.		8038	4	Clamp
4.		8042	1	Bottom Radiator Hose
5.		8041	1	Top Radiator Hose
6.		8040	1	Fan Guard
7.		8039	1	Rain Cap
8.		7601	1	Muffler
9.		8043	1	Exhaust Gasket
10.		8045	1	Fan
11.		8037	6	Capscrew
12.		8037	4	Capscrew
13.		7802	1	Cooler Bracket L.H.
14.		7801	1	Cooler Bracket R.H.

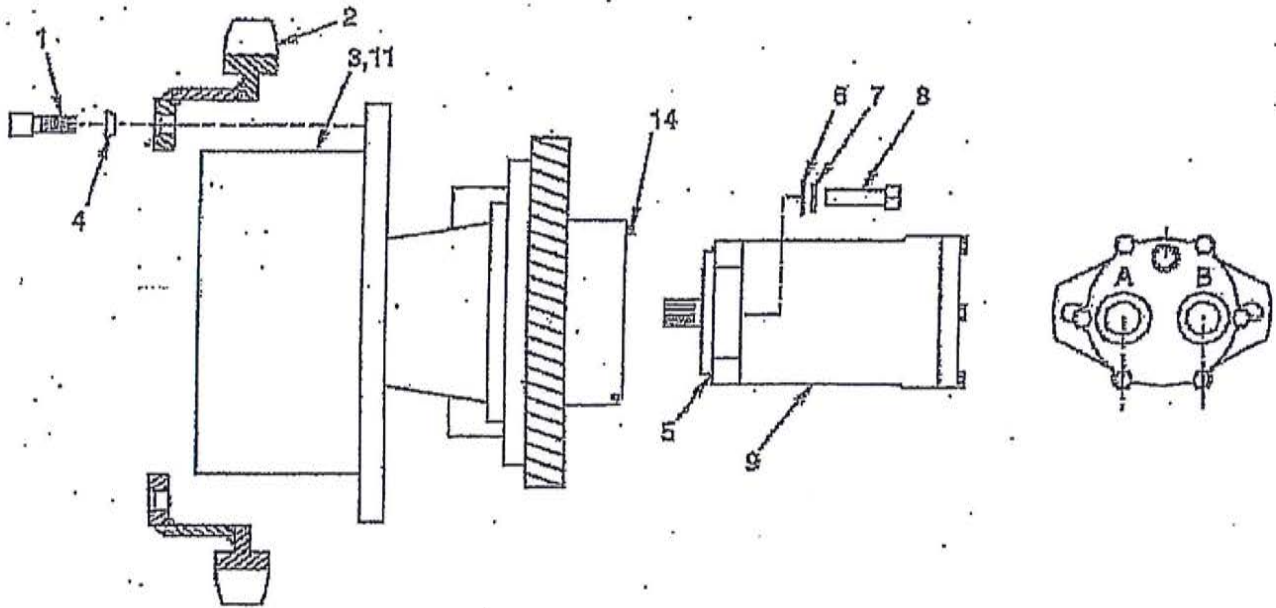


DRIVE COUPLING ASSEMBLY



ITEM	NOTES	PART NUMBER	QTY	
1.		8047	1	Drive Coupling
2.		8048	1	Pump Mount Plate
3.		8046	1	Flex Plate
4.		500306	2	Capscrew
5.		500058	2	Lockwasher
6.		500882	2	SAE Flatwasher
7.		588190	8	Capscrew
8.		7383	8	Lockwasher
9.		7082	8	Capscrew

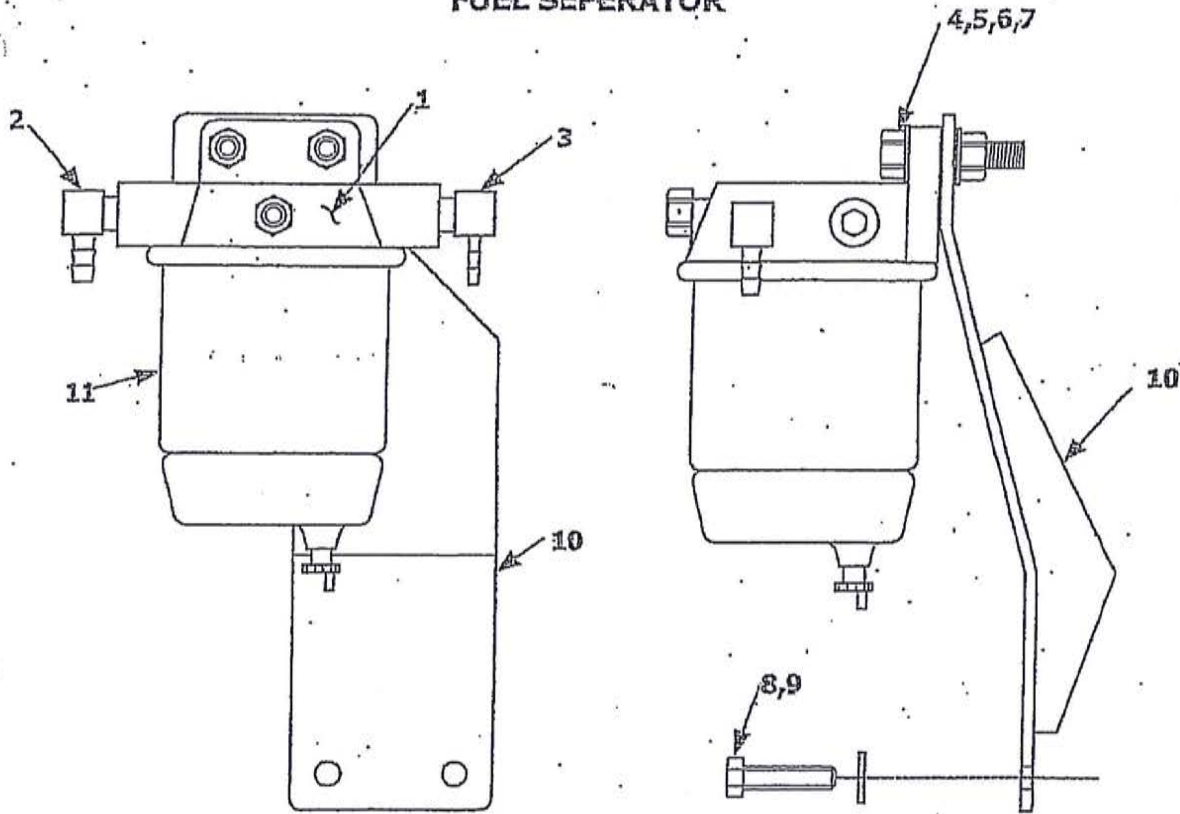
PLANETARY GEARBOX ASSEMBLY



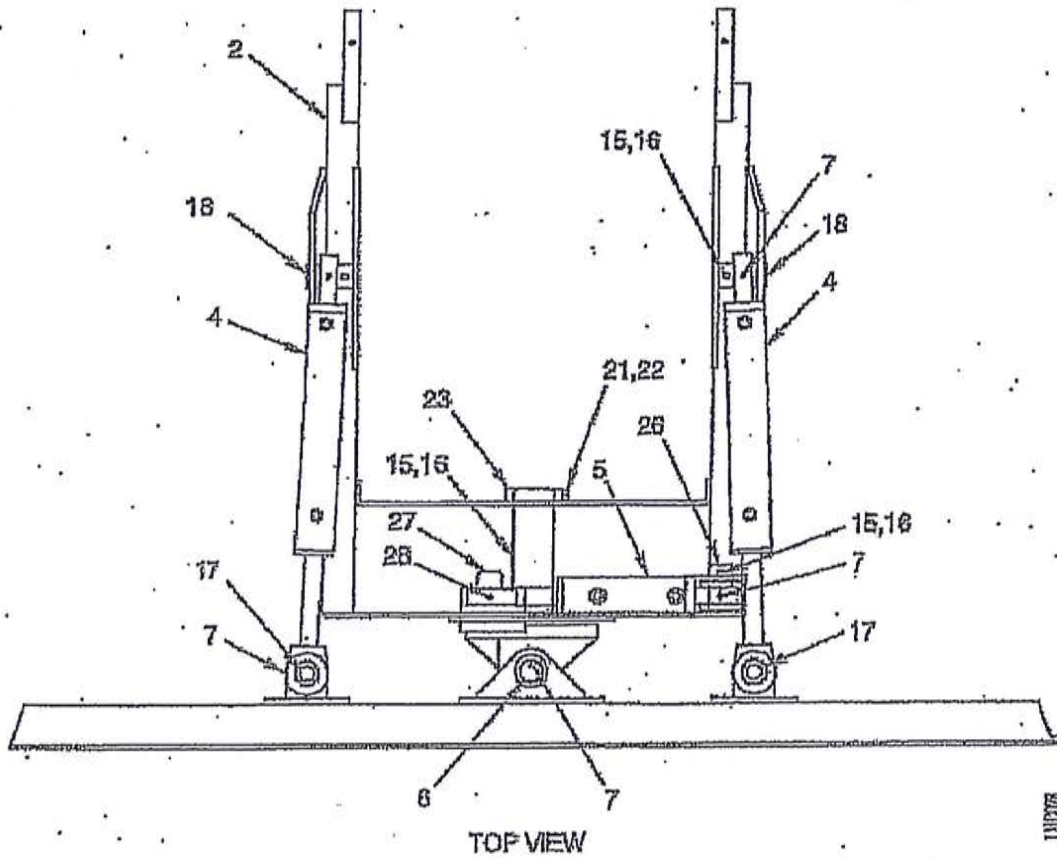
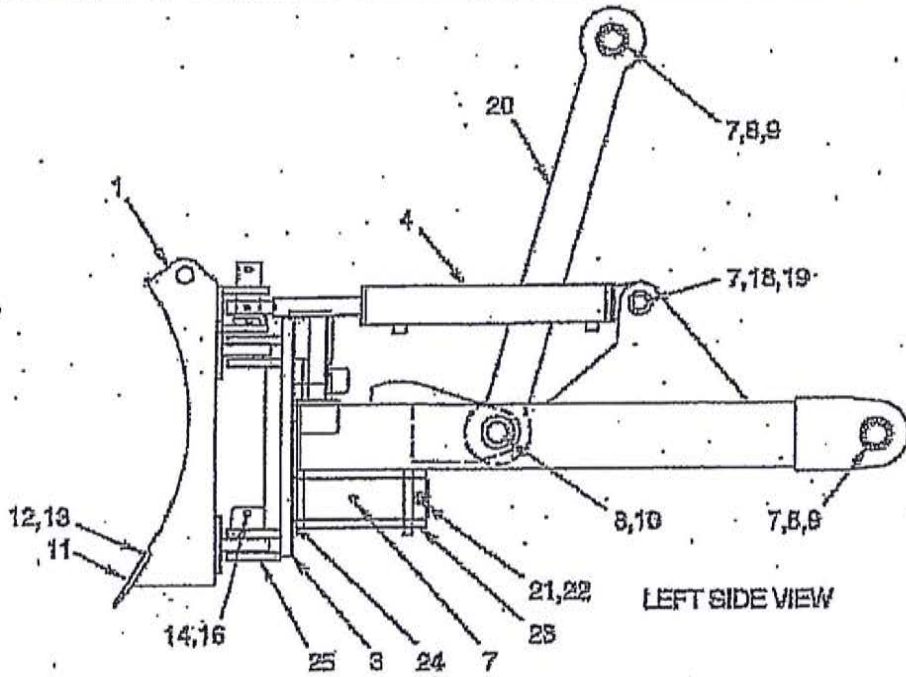
ITEM	NOTES	PART NUMBER	QTY	
1.		7353	16	Capscrew
2.		7371	1	Sprocket
3.		7390	1	Planetary Gearbox
4.		7203	16	Washer
5.		12550	1	O-Ring
7.		500058	2	Lockwasher
8.		7151	2	Capscrew
9.		7218	1	Motor



FUEL SEPERATOR



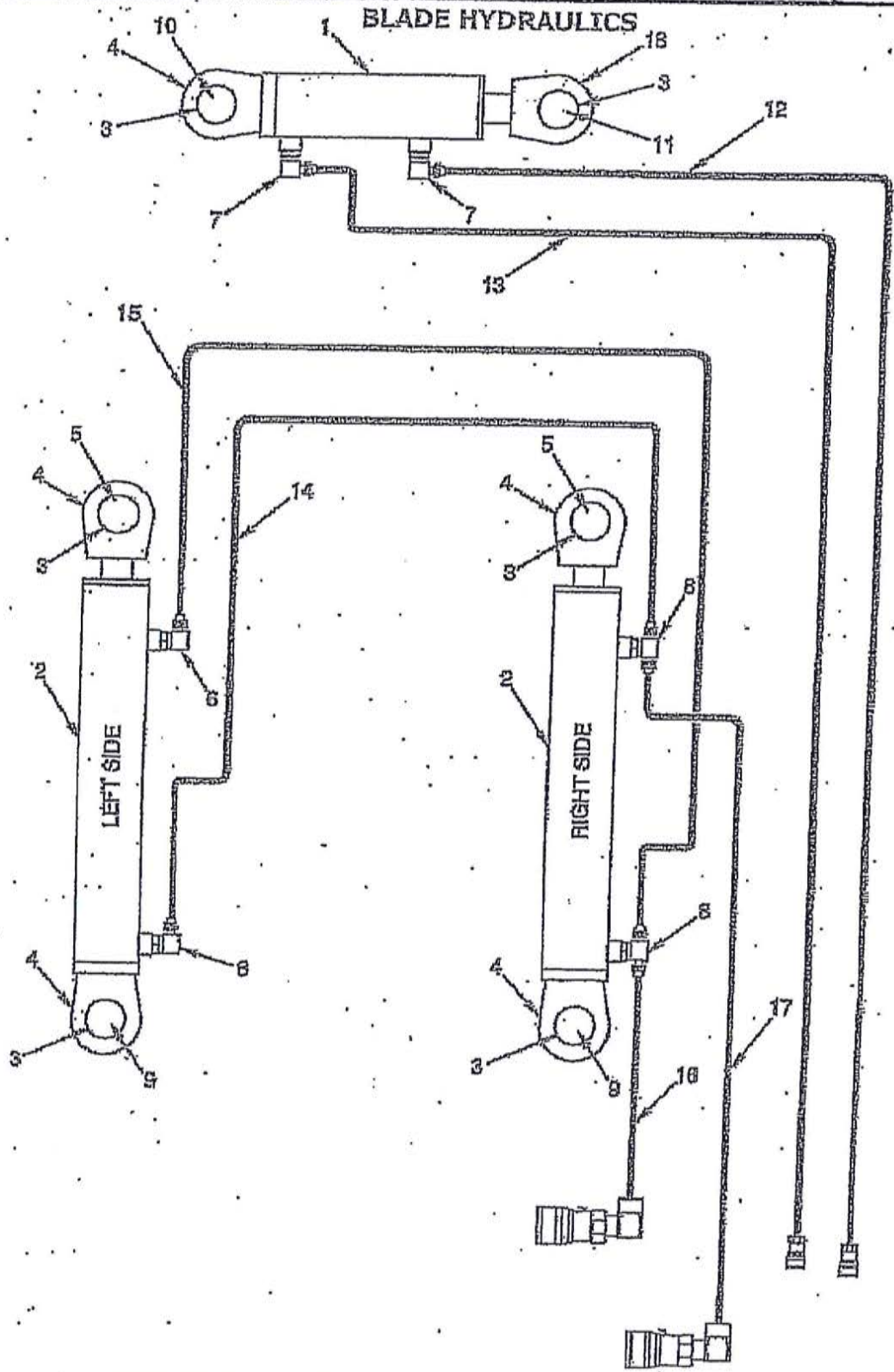
ITEM	NOTES	PART NUMBER	QTY	
1.		7403	1	Fuel Seperator
2.		7415	1	Fitting
3.		7414	1	Fitting
4.		335	2	Capscrew
5.		588115	2	Flatwasher
6.		500447	2	Lockwasher
7.		500446	2	Nut
8.		12559	2	Capscrew
9.		5601696	2	Lockwasher
10.		7421	1	Bracket
11.		7404	1	Filter Element





Section 4 Parts

ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
		7000		Blade Assembly
1		580480	1	Blade
2		589100	1	"C" Frame
3		580494	1	Yoke
4		585210-2	2	Angle Cylinder
5		585210-1	1	Tilt Cylinder
6		585967	2	Pin
7		500320	1	Lube Fitting
8		T21-1	4	Bearing, 12SF-20
9		589015	3	Pin
10		589105	1	Pin
11		580386	1	Cutting Edge (set)
12		G12-405	11	Plow Bolt
13		K10-7	11	Nut, 7/16-14 ESSNA
14		500705	4	Bolt, 5/16-18 x 2-1/2 HHCS
15		588148	6	Bolt
16		K10-5	8	Nut, 5/16-16 ESSNA
17		540274-14	2	Pin
18		589104	2	Pin
19		707995	6	Bearing, 8SF-14
20		589102	1	Arm
21		589076	1	Capscrew, 3/8-16 x 5 HHCS
22		K10-6	1	Nut, Lock, 3/8-16
23		580620	1	Retainer Ring
24		580618	1	Spacer
25		T20-1	2	Bearing, 20DU12
26		540274-16	1	Pin
27		589103	1	Pin
28		271287	1	Fitting



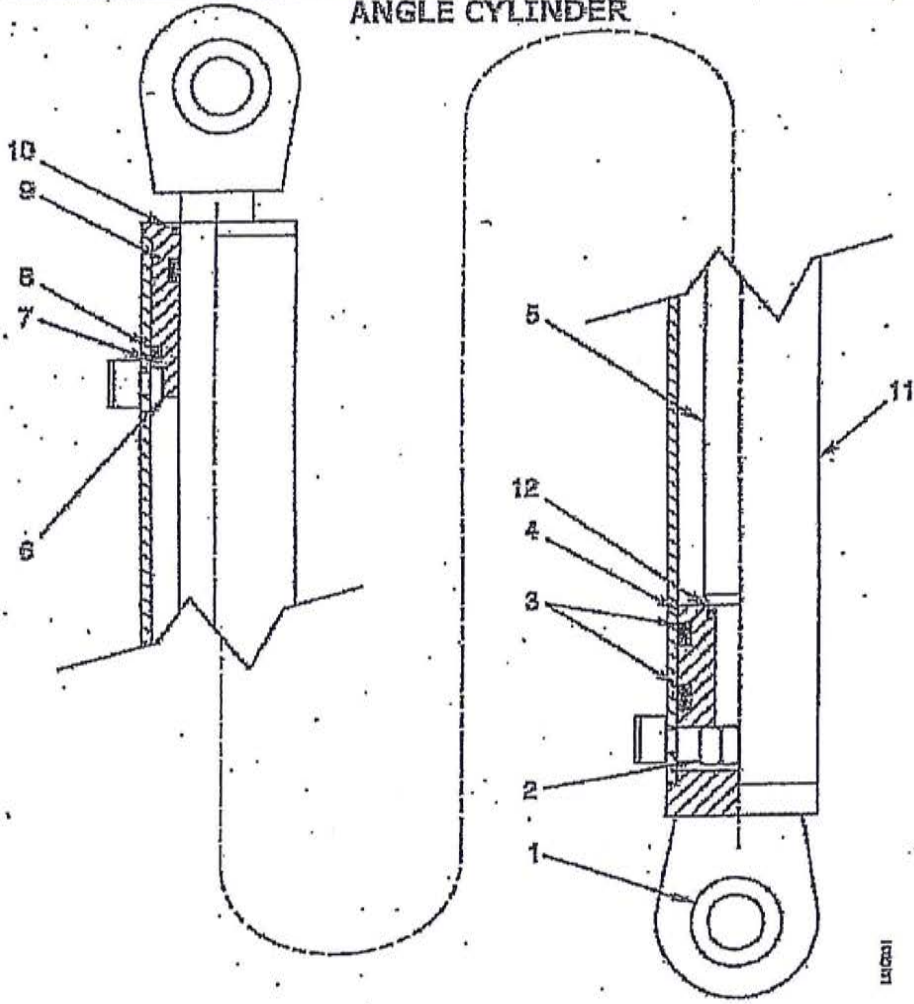


BLADE HYDRAULICS

ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
				Blade Hydraulics
1		585210-1	1	Tilt Cylinder
2		585210-2	2	Angle Cylinder
3		707395	6	Bearing, BSF-14
4		500320	5	Fitting
5		540274-14	2	Pin
6		550629	2	Adapter
7		589103	2	Adapter
8		400884	2	Adapter
9		589104	2	Pin
10		540274-16	1	Pin
11		589103	1	Pin
12		8019	1	Hose
13		8020	1	Hose
14		589109	1	Hose
15		589110	1	Hose
16		8021	1	Hose
17		8022	1	Hose
18		271287	1	Fitting
19		588071	2	Coupler
20		A67-88	2	Street Elbow
21		588075	2	Coupling



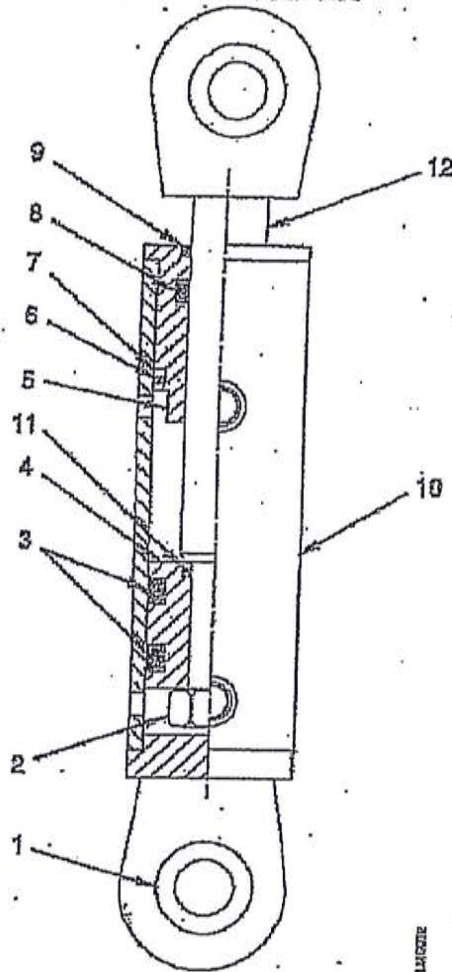
ANGLE CYLINDER



ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
		585210-2		Angle Cylinder
1		707385	2	Bearing, BSF-14
2		K10-12	2	Nut
3	*	N15-2	2	Seal
4		585263	1	Piston
5		585268	1	Rod
6		585259	1	Head
7	*	N10-224	1	O-Ring
8	*	N13-224	1	Back-Up Ring
9	*	N15-1	1	Seal
10	*	N16-11	1	Rod Wiper
11		585210	1	Shell
12	*	N10-18	1	O-Ring
	*	585074-22		Seal Kit



TILT CYLINDER



LAYTON

ITEM	NOTES	PART NUMBER	QTY	DESCRIPTION
1		585210-1		Tilt Cylinder
2		707395	2	Bearing, 8SF-14
3	*	K10-12	2	Nut
4		N15-2	2	Seal
5		585263	1	Piston
6		585259	1	Head
7	*	N10-224	1	O-Ring
8	*	N13-224	1	Back-Up Ring
9	*	N15-1	1	Seal
10	*	N16-11	1	Rod Wiper
11		585210	1	Shell
12	*	N10-18	1	O-Ring
		585269	1	Rod
	*	585074-22		Seal Kit