

EQUIPMENT  
REPAIRS

DATE 3-11-13

MILEAGE/HOURS 57,000 mi

EQUIPMENT REPAIRED #17 Int. Mechanics Truck

REPAIRS MADE replaced wiper blades

HOURS WORKED \_\_\_\_\_

PARTS USED

Blades

27.05

Advance



THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

<b>EQUIPMENT INFORMATION</b>		<b>EQUIPMENT DOWNTIME</b>	
EQUIP. # <u>17</u>		HOURS _____ DAYS _____	
MAKE <u>International</u>		REASON _____	
MODEL <u>444</u>		PARTS _____ LABOR _____	
SERIAL # <u>Mech. Truck</u>		OTHER _____	
HOUR METER _____		OTHER _____	
MILES _____		OTHER _____	
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			
SMOKES SHORTED VIBRATE OTHER _____			
JOB NAME/LOCATION <u>Shop</u>		DATE: _____	
JOB NUMBER _____		MECHANIC <u>James</u>	
DATE COMPLETED <u>7-11-13</u>		COMPONENT CODES	
BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS		POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
COMPONENT LOCATION		FRONT REAR LEFT RIGHT UPPER LOWER	
OTHER _____		OTHER _____	

PROBLEM: Lamp blown

REPAIRED: replaced left inner tail lamp assembly

PARTS: Lamp Assembly 10.91 Advance Aut P-5

# TEC

THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>17</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98' 4700</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # _____		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			DATE: _____ DATE COMPLETED <u>1-28-14</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			MECHANIC <u>James + Jeff</u>	
SMOKES SHORTED VIBRATE OTHER _____			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER _____
PROBLEM: <u>batteries old + bad</u>				
REPAIRED: <u>replaced both batteries</u>				
PARTS: <u>2-Grp 31 Batteries 218.48 Advance Auto Parts</u>				

# TEC

THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>17</u>	REASON  PARTS      LABOR  OTHER _____	BASIC MACHINE    HYDRAULIC    ENGINE    IMPLEMENTS		
MAKE <u>International</u>		POWER TRAIN    ELECTRIC    DRIVE TRAIN    UNEXPLAINED		
MODEL <u>98' 4700</u>		COMPONENT LOCATION		
SERIAL # _____		FRONT    REAR    LEFT    RIGHT    UPPER    LOWER		
HOUR METER _____		OTHER _____		
MILES _____				
REASON FOR FAILURE:    BROKEN    WORN    ABUSE    LOOSE    SEIZED			DATE: _____ DATE COMPLETED <u>5-15-14</u>	
OVERHEAT    PLANNED    CONTAM    LEAKING    NOISY    SCRATCH			MECHANIC <u>JAMES</u>	
SMOKES    SHORTED    VIBRATE    OTHER _____			JOB NAME/LOCATION <u>Shop</u>	
JOB NUMBER				
PROBLEM: <u>back brakes sticking</u>				
REPAIRED: <u>replaced rear brake pads and calipers</u>				
PARTS: <u>2-calipers</u> <u>124.52</u>				
<u>set of pads</u> <u>75.37</u>				
<u>\$199.89</u>				
<u>O'Reilly Auto Parts</u>				



# TEC

THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

<b>EQUIPMENT INFORMATION</b> EQUIP. # <u>17</u> MAKE <u>International</u> MODEL <u>98' 4700</u> SERIAL # <u>JAMES</u> HOUR METER _____ MILES <u>60K</u>	<b>EQUIPMENT DOWNTIME</b> HOURS _____ DAYS _____ REASON _____ PARTS _____ LABOR _____ OTHER _____	<b>COMPONENT CODES</b> BASIC MACHINE   HYDRAULIC   ENGINE   IMPLEMENTS POWER TRAIN   ELECTRIC   DRIVE TRAIN   UNEXPLAINED <b>COMPONENT LOCATION</b> FRONT   REAR   LEFT   RIGHT   UPPER   LOWER OTHER _____						
REASON FOR FAILURE:   BROKEN   WORN   ABUSE   LOOSE   SEIZED OVERHEAT   PLANNED   CONTAM   LEAKING   NOISY   SCRATCH SMOKES   SHORTED   VIBRATE   OTHER _____		DATE: _____   DATE COMPLETED <u>11-4-14</u> MECHANIC <u>James</u> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 2px;">JOB NAME/LOCATION <u>Shop</u></td> <td style="width: 30%; padding: 2px;">JOB NUMBER</td> </tr> </table>	JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER				
JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER							
PROBLEM: <u>water pump leak</u>								
REPAIRED: <u>replaced water pump, thermostat + new anti freeze</u>								
<table style="width: 100%;"> <tr> <td style="width: 33%;">PARTS: <u>w-pump</u></td> <td style="width: 33%;"><u>277.<sup>48</sup></u></td> <td style="width: 33%;"><u>O'Reilly Auto Parts</u></td> </tr> <tr> <td><u>Thermostat</u></td> <td><u>13.<sup>42</sup></u></td> <td><u>NAPA</u></td> </tr> </table>			PARTS: <u>w-pump</u>	<u>277.<sup>48</sup></u>	<u>O'Reilly Auto Parts</u>	<u>Thermostat</u>	<u>13.<sup>42</sup></u>	<u>NAPA</u>
PARTS: <u>w-pump</u>	<u>277.<sup>48</sup></u>	<u>O'Reilly Auto Parts</u>						
<u>Thermostat</u>	<u>13.<sup>42</sup></u>	<u>NAPA</u>						

EQUIPMENT  
REPAIRS

DATE 2-5-15

MILEAGE/HOURS 62K

EQUIPMENT REPAIRED #17 78' International Mech. Truck

REPAIRS MADE Serviced

HOURS WORKED \_\_\_\_\_

PARTS USED

Filters

\$1.<sup>00</sup>

Tenn Filter sales

# TEC

THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>17</u>	REASON  PARTS      LABOR  OTHER _____	HOURS _____ DAYS _____	BASIC MACHINE    HYDRAULIC    ENGINE    IMPLEMENTS	
MAKE <u>International</u>		POWER TRAIN    ELECTRIC    DRIVE TRAIN    UNEXPLAINED		
MODEL <u>4700</u>		COMPONENT LOCATION		
SERIAL # <u>Mechanic Truck</u>		FRONT    REAR    LEFT    RIGHT    UPPER    LOWER		
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE:    BROKEN    WORN    ABUSE    LOOSE    SEIZED			DATE: _____ DATE COMPLETED <u>5-29-15</u>	
OVERHEAT    PLANNED    CONTAM    LEAKING    NOISY    SCRATCH			MECHANIC <u>James</u>	
SMOKES    SHORTED    VIBRATE    OTHER _____			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER
PROBLEM: <u>master cylinder locking up.</u>				
REPAIRED: <u>replaced master cylinder</u>				
PARTS: <u>Master cylinder 128.00 O'Reilly Auto Parts</u>				

# TEC

THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>17</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>Toyota</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>03' Tacoma</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # _____		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			DATE: _____ DATE COMPLETED _____	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			MECHANIC _____	
SMOKES SHORTED VIBRATE OTHER _____			JOB NAME/LOCATION	JOB NUMBER
PROBLEM: <u>Blown tire hit bumper broke turn signal</u>				
REPAIRED: <u>replaced turn signal</u>				
PARTS: <u>lamp</u> <u>18.57</u> <u>New Body Parts</u>				

# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

### EQUIPMENT INFORMATION

EQUIP. #

17

MAKE

International

MODEL

98 Mch. Truck

SERIAL #

HOUR METER

MILES

### EQUIPMENT DOWNTIME

HOURS \_\_\_\_\_ DAYS \_\_\_\_\_

REASON

PARTS

LABOR

OTHER

### COMPONENT CODES

BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS

POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED

### COMPONENT LOCATION

FRONT REAR LEFT RIGHT UPPER LOWER

OTHER

REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED

OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH

SMOKES SHORTED VIBRATE OTHER

DATE:

DATE COMPLETED 10-20-15

MECHANIC

JAMES

JOB NAME/LOCATION

Shop

JOB NUMBER

PROBLEM:

Anti-freeze leak

REPAIRED:

replaced thermostat & housing

PARTS:

stat housing

120.03

Cumberland tractor

# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION	EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>17</u>	HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>	REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98'</u>	PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # _____	OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____		OTHER _____	
MILES _____			
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH SMOKES SHORTED VIBRATE OTHER _____		DATE: _____ DATE COMPLETED <u>11-6-15</u> MECHANIC <u>James &amp; Steve</u>	
		JOB NAME/LOCATION <u>Shops</u>	JOB NUMBER
PROBLEM: _____ _____ _____			
REPAIRED: <u>Replaced bad crane solenoid</u> <u>replaced oil/fuel Tanks</u> _____ _____ _____ _____ _____ _____			
PARTS: <u>solenoid</u> <u>89.03</u> <u>NAPA</u> <u>Tanks</u> <u>75.50</u> <u>CQ of Lebanon</u> _____ _____ _____			



**TEC**  
**THORNE'S EXCAVATING COMPANY, LLC**  
SINCE 1963

EQUIPMENT INFORMATION	EQUIPMENT DOWNTIME	COMPONENT CODES
EQUIP. # <u>17</u>	HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS
MAKE <u>International</u>	REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED
MODEL <u>4700</u>	PARTS _____ LABOR _____	COMPONENT LOCATION
SERIAL # <u>Mech Truck</u>	OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER
HOUR METER _____		OTHER _____
MILES _____		
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH SMOKES SHORTED VIBRATE OTHER _____		DATE: _____ DATE COMPLETED <u>3-25-16</u> MECHANIC <u>JAMES</u>
PROBLEM: <u>needs steer tires</u>		JOB NAME/LOCATION <u>Shop</u> JOB NUMBER _____
REPAIRED: <u>replaced steer tires</u>		
PARTS: <u>2-ster tires</u> <u>766.42</u> <u>Gateway Tire</u> <u>1090</u>		

# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>17</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>4700 95' model</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # <u>Mech Truck</u>		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES <u>67K mi.</u>				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH SMOKES SHORTED VIBRATE OTHER _____			DATE: _____ DATE COMPLETED <u>7-6-16</u> MECHANIC <u>Steven</u>	
			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER
PROBLEM: <u>Serviced</u>				
REPAIRED: <u>Serviced Truck, Air Comp &amp; welder</u>				
PARTS: <u>All Filters</u> <u>82.55</u> <u>Napa</u>				

**TEC**  
**THORNE'S EXCAVATING COMPANY, LLC**  
SINCE 1963

<b>EQUIPMENT INFORMATION</b> EQUIP. # <u>17</u> MAKE <u>International</u> MODEL <u>4700 98'</u> SERIAL # _____ HOUR METER _____ MILES _____	<b>EQUIPMENT DOWNTIME</b> HOURS _____ DAYS _____ REASON _____ PARTS _____ LABOR _____ OTHER _____	<b>COMPONENT CODES</b> BASIC MACHINE   HYDRAULIC   ENGINE   IMPLEMENTS POWER TRAIN   ELECTRIC   DRIVE TRAIN   UNEXPLAINED  <b>COMPONENT LOCATION</b> FRONT   REAR   LEFT   RIGHT   UPPER   LOWER OTHER _____ _____
REASON FOR FAILURE:   BROKEN   WORN   ABUSE   LOOSE   SEIZED OVERHEAT   PLANNED   CONTAM   LEAKING   NOISY   SCRATCH SMOKES   SHORTED   VIBRATE   OTHER _____		DATE: _____   DATE COMPLETED <u>6-12-17</u> MECHANIC <u>James + Steven</u> JOB NAME/LOCATION <u>Shop</u> JOB NUMBER _____
PROBLEM: <u>left rear caliper sticking</u> _____ _____		
REPAIRED: <u>replaced both rear calipers &amp; pads</u> _____ _____ _____ _____ _____ _____ _____		
PARTS: <u>caliper + pads</u> <u>161.45</u> <u>Truck Pro</u> <u>caliper</u> <u>97.00</u> <u>Fleet pride</u> <u>Brake fluid</u> <u>10.49</u> <u>Advance</u> _____ _____		

# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME		COMPONENT CODES	
EQUIP. # <u>0102</u>		HOURS _____ DAYS _____		BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>		REASON _____		POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98' 444</u>		PARTS _____ LABOR _____		COMPONENT LOCATION	
SERIAL # _____		OTHER _____		FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____				OTHER _____	
MILES _____					
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH SMOKES SHORTED VIBRATE OTHER _____				DATE: _____ DATE COMPLETED <u>11-19-18</u>	
				MECHANIC <u>Ali</u>	
				JOB NAME/LOCATION <u>Shop</u>	
				JOB NUMBER _____	
PROBLEM: <u>choke cable broken on air comp</u>					
REPAIRED: <u>replaced choke cable</u>					
PARTS: <u>Cable</u> <u>36.04</u> <u>Napa</u>					

# TEC

THORNE'S EXCAVATING COMPANY, LLC  
SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>Tut</u>		REASON	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98' 4700</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # <u>Auto Crane</u>		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			DATE: _____ DATE COMPLETED <u>3-7-19</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			MECHANIC <u>Bryan</u>	
SMOKES SHORTED VIBRATE OTHER _____			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER
PROBLEM: <u>crane battery</u>				
REPAIRED: <u>replaced battery</u>				
PARTS: <u>Grp. 27</u> <u>105.6</u> <u>Interstate Battery</u>				

# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION	EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>	HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>	REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98' 4700</u>	PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # _____	OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____		OTHER _____	
MILES <u>174k mi.</u>			
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED		DATE: <u>2-21-2020</u> DATE COMPLETED <u>2-22-2020</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH		MECHANIC <u>Bryan + Max</u>	
SMOKES SHORTED VIBRATE OTHER _____		JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER
PROBLEM: <u>rt wheel seal leaking.</u>			
REPAIRED: <u>replaced RT wheel seal, rotor &amp; pads</u>			
PARTS: <u>wheel seal, rear pads &amp; rotors 388.45 Truck Pro.</u>			



# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>Int.</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>Mech Truck</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # <u>Auto crane</u>		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES <u>74,525 mi</u>				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			DATE: <u>4-14-2020</u> DATE COMPLETED <u>4-15-2020</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			MECHANIC <u>JAMES</u>	
SMOKES SHORTED VIBRATE OTHER _____			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER _____
PROBLEM: <u>crane quit</u>				
REPAIRED: <u>replaced bad battery</u>				
<u>replaced bad solenoids</u>				
PARTS: <u>battery Pro rate \$55.00 Interstate battery</u>				
<u>solenoids 2017.55 Napa</u>				

# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>Auto CRANE</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL _____		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # _____		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			DATE: <u>5-27-20</u> DATE COMPLETED <u>5-29-20</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			MECHANIC <u>JAMES &amp; BOYAN</u>	
SMOKES SHORTED VIBRATE OTHER _____			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER
PROBLEM: <u>lift motor failure</u>				
REPAIRED: <u>had lift motor rebuilt</u>				
PARTS: <u>lift motor</u> <u>74.63</u> <u>Crooks' Auto Electric</u>				

# TEC

THORNE'S EXCAVATING COMPANY, LLC  
SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>	HOURS _____ DAYS _____	REASON	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>Int'l. Int'l.</u>			POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98 4700</u>	PARTS	LABOR	COMPONENT LOCATION	
SERIAL # _____	OTHER _____	_____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES <u>75,000 mi</u>			_____	
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			DATE: _____ DATE COMPLETED <u>6-18-20</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			MECHANIC <u>Mac Daddy</u>	
SMOKES SHORTED VIBRATE OTHER _____			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER
PROBLEM: <u>RT rear wheel seal leak</u>				
REPAIRED: <u>replaced seal</u>				
PARTS: <u>seal</u> <u>45.<sup>00</sup></u> <u>O'Reilly Auto Parts</u>				
<u>320023A</u>				

# TEC

THORNE'S EXCAVATING COMPANY, LLC  
SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>	HOURS _____ DAYS _____	REASON	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>			POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98' 4700</u>	PARTS	LABOR	COMPONENT LOCATION	
SERIAL # <u>Mech. Truck</u>	OTHER _____		FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES <u>75K mi</u>				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH SMOKES SHORTED VIBRATE OTHER _____			DATE <u>7-20-20</u>	DATE COMPLETED <u>7-29-20</u>
			MECHANIC <u>Ben</u>	
			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER _____
PROBLEM: <u>Service</u>				
REPAIRED: <u>Service</u>				
PARTS: <u>All Fitters</u> <u>106.84</u> <u>Tenn Fitter Sales</u> <u>water Pump &amp; seals kit</u> <u>330.39</u> <u>Advance Auto Parts</u>				



# TEC

THORNE'S EXCAVATING COMPANY, LLC  
SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <del>11920</del> 0102		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>4700</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # _____		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH SMOKES SHORTED VIBRATE OTHER _____		DATE: _____ DATE COMPLETED <u>11-9-20</u> MECHANIC <u>James</u>		
		JOB NAME/LOCATION <u>Shop</u> JOB NUMBER _____		
PROBLEM: <u>relay stuck. Hydraulic brake motor</u>				
REPAIRED: <u>replaced relay</u>				
PARTS: <u>AR7277 Relay</u> <u>28.72</u> <u>NAPA</u>				

# TEC

THORNE'S EXCAVATING COMPANY, LLC  
SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>	MAKE <u>International</u>	HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MODEL <u>4700</u>	SERIAL # <u>Mech Truck</u>	REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
HOUR METER _____	MILES _____	PARTS _____ LABOR _____	COMPONENT LOCATION	
		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
			OTHER _____	
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED			DATE: _____ DATE COMPLETED <u>9-22-21</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH			MECHANIC <u>James &amp; Brian</u>	
SMOKES SHORTED VIBRATE OTHER _____			JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER _____
PROBLEM: <u>won't start one bad battery</u>				
REPAIRED: <u>replaced cam sensor &amp; DSL press. sensor</u> <u>replaced batteries 8 yrs old.</u>				
PARTS: <u>DSL Press. sensor 149.<sup>99</sup></u> <u>Advance</u>				
<u>Cam sensor 20.<sup>76</sup></u> <u>Advance</u>				
<u>2- 315 batteries 278.<sup>02</sup></u> <u>Advance</u>				



# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

### EQUIPMENT INFORMATION

EQUIP. # 0102  
MAKE International  
MODEL 98 4700  
SERIAL # \_\_\_\_\_  
HOUR METER \_\_\_\_\_  
MILES 75K mi

### EQUIPMENT DOWNTIME

HOURS \_\_\_\_\_ DAYS \_\_\_\_\_  
REASON \_\_\_\_\_  
PARTS \_\_\_\_\_ LABOR \_\_\_\_\_  
OTHER \_\_\_\_\_

### COMPONENT CODES

BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS  
POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED

### COMPONENT LOCATION

FRONT REAR LEFT RIGHT UPPER LOWER

OTHER \_\_\_\_\_  
\_\_\_\_\_

REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED

OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH

SMOKES SHORTED VIBRATE OTHER \_\_\_\_\_

DATE: \_\_\_\_\_ DATE COMPLETED 3-22-23

MECHANIC All

JOB NAME/LOCATION

Shop

JOB NUMBER

PROBLEM: Service Truck & welder

REPAIRED: Serviced Truck & welder

PARTS: 1734 Oil

170.32

Napa

2253 Air

3817 Fuel

4071 coolant

3358 Fuel

1768 Oil

3352 Fuel

2222 Air

# TEC

THORNE'S EXCAVATING COMPANY, LLC  
SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME		COMPONENT CODES	
QUIP. # <u>0102</u>		HOURS _____ DAYS _____		BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>		REASON _____		POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98' Auto Crane</u>		PARTS _____ LABOR _____		COMPONENT LOCATION	
SERIAL # _____		OTHER _____		FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____				OTHER _____	
MILES _____					
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED				DATE: _____ DATE COMPLETED <u>6-27-23</u>	
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH				MECHANIC <u>Anthony</u>	
SMOKES SHORTED VIBRATE OTHER _____				JOB NAME/LOCATION <u>Shop</u>	
PROBLEM: <u>winch motor bad</u>				JOB NUMBER _____	

REPAIRED: replaced winch motor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PARTS: motor ~~327.06~~ 327.06 Carquest  
Crooks

# TEC

## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>Mack</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>96' CH613</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # <u>Fuel Truck</u>		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED		DATE: _____ DATE COMPLETED <u>8-11-23</u>		
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH		MECHANIC <u>Anthony</u>		
SMOKES SHORTED VIBRATE OTHER _____		JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER _____	
PROBLEM: <u>needs batteries</u>				
REPAIRED: <u>replaced batteries</u>				
PARTS: <u>3. GARD 31 std.</u> <u>460.79</u> <u>Interstate Battery</u>				

# TEC

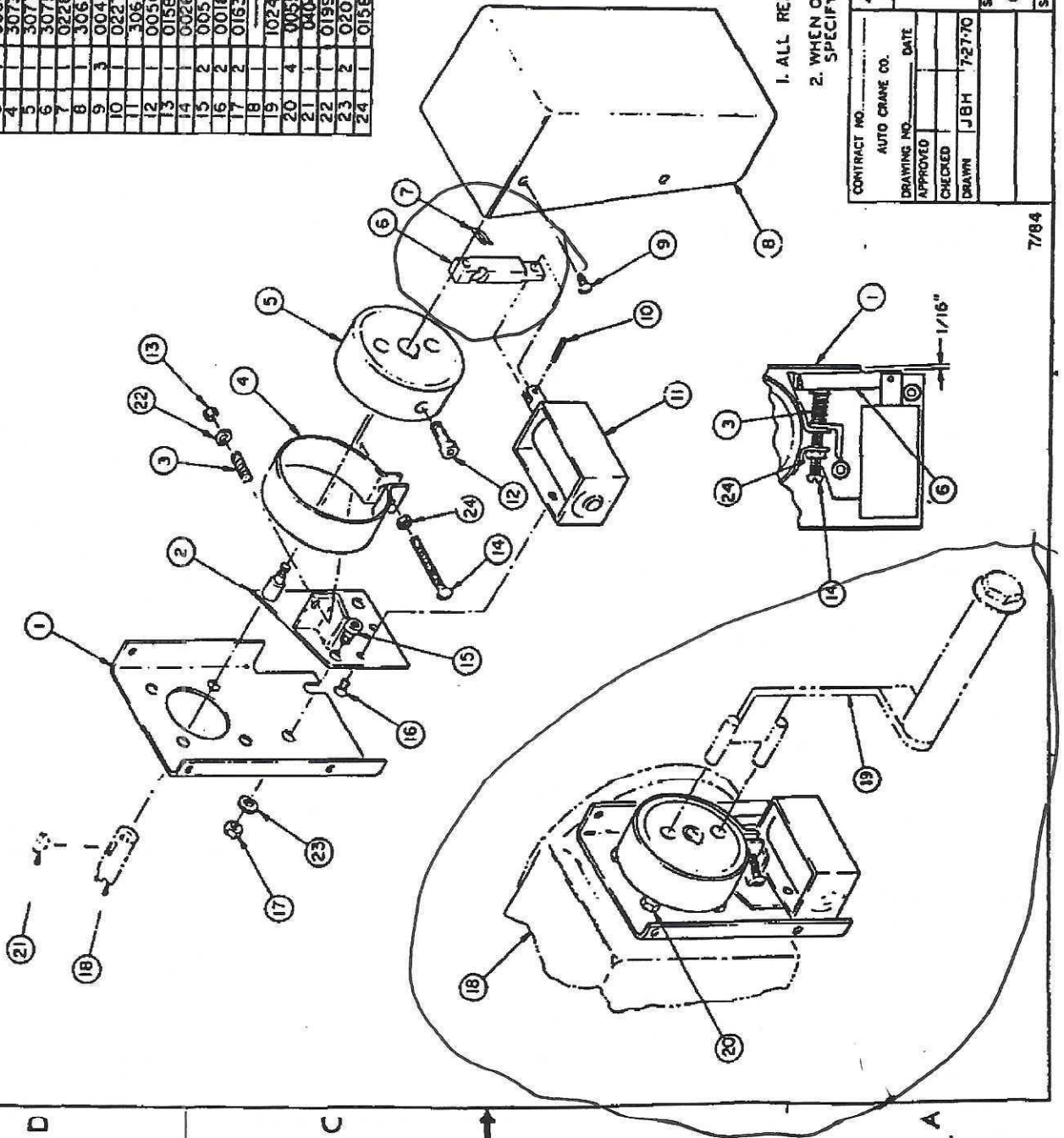
## THORNE'S EXCAVATING COMPANY, LLC

SINCE 1963

EQUIPMENT INFORMATION		EQUIPMENT DOWNTIME	COMPONENT CODES	
EQUIP. # <u>0102</u>		HOURS _____ DAYS _____	BASIC MACHINE HYDRAULIC ENGINE IMPLEMENTS	
MAKE <u>International</u>		REASON _____	POWER TRAIN ELECTRIC DRIVE TRAIN UNEXPLAINED	
MODEL <u>98' 4700</u>		PARTS _____ LABOR _____	COMPONENT LOCATION	
SERIAL # <u>Mech. Truck</u>		OTHER _____	FRONT REAR LEFT RIGHT UPPER LOWER	
HOUR METER _____			OTHER _____	
MILES _____				
REASON FOR FAILURE: BROKEN WORN ABUSE LOOSE SEIZED		DATE: <u>7-12-24</u> DATE COMPLETED <u>8-1-24</u>		
OVERHEAT PLANNED CONTAM LEAKING NOISY SCRATCH		MECHANIC <u>Anthony</u>		
SMOKES SHORTED VIBRATE OTHER _____		JOB NAME/LOCATION <u>Shop</u>	JOB NUMBER _____	
PROBLEM: <u>Crane boom motor not working</u>				
REPAIRED: <u>replaced motor &amp; 3 old solenoids</u>				
PARTS: <u>motor</u> <u>Crooks'</u> <u>317.15</u>				
<u>2 solenoids</u>				



ITEM	QTY	PART NO.	DESCRIPTION
1		307201	CHANNEL (REF)
2		330403	BRACKET
3		308000	COMPRESSION SPRING
4		307300	BRAKE BAND
5		307701	BRAKE HUB ASSEMBLY (REF)
6		307500	LEVER
7		022800	CARBURETOR CLIP, 1/8"
8		306700	GUARD, ACTUATOR BRAKE (REF)
9	3	004800	SCREW, #10 X 3/8 S.T. PL. HD. (REF)
10	1	022700	SELOK PIN 3/32 X 1/2
11		306412	SOLENOID
12		005610	SCREW, 1/4-20 X 3/4 (REF)
13		015800	NUT, #10-32 SELF-LOCKING
14		002603	SCREW, #10-32 X 2 RD. HD.
15	2	005609	SCREW, 1/4-20 X 5/8 (REF)
16	2	001800	SCREW, #10-32 X 1/4 FLAT HD.
17	2	016300	NUT, 1/4-20 SELF-LOCKING (REF)
18			ACTUATOR ASSEMBLY (REF)
19	1	102400	HAND CRANK (REF)
20	4	005903	SCREW, 1/4-20 X 7/8 SOC. HD. (REF)
21		000408	WOODRUFF KEY #404 (REF)
22		019900	#10 FLAT WASHER CP (REF)
23	2	020400	WASHER, 1/4 FLAT (REF)
24	1	015803	10-32 CNTR. LOCK NUT CP



1. ALL REF. ITEMS MUST BE ORDERED SEPARATE.
2. WHEN ORDERING PARTS BE SURE TO SPECIFY MODEL AND SERIAL NUMBER.

AUTO CRANE COMPANY

BRAKE ASSEMBLY 12V.

SIZE CODE IDENT. NO. DRAWING NO.

AW - 308201

SHEET OF

7/84

## MAINTENANCE OF 12/24 VOLT BRAKE KIT

### 1. FUNCTION

A brake is incorporated on each actuator. The brake was designed to perform two functions. One of the functions is load holding after the pendant switch is neutralized. The other function is to prevent excessive coasting after either pendant switch release or the boom travel limit switch is triggered.

### 2. TROUBLE SHOOTING

A. Problem	Cause	Repair
Brake fails to hold load or stop hub effectively	Damaged or out of adjustment	Replace damaged parts. If necessary, adjust per instructions.
B. Brake hub turns on shaft	Woodruff key sheared in actuator shaft	Replace Key
C. No electrical current to brake	Broken Wires or damaged terminals	Replace wiring to brake
D. Solenoid inoperative	Dirty contact points at solenoid	Remove brake wires from solenoid terminals, clean and reattach.
	Solenoid burned out	Replace with new solenoid.

### 3. ADJUSTMENT:

A view of proper adjustment of the brake is shown on illustration and inside brake guard, Item (8). The sequence is repeated here in the event the instructions in the cover are not available.

- A. Remove brake guard (Item 8) by removing three # 10 pan HD screws.
- B. Inspect brake assembly to insure that no foreign objects will impair a proper setting of the brake.
- C. Hold the self-locking nut (Item 13) with a proper wrench. With a screwdriver, turn the adjusting screw (Item 14) until a clearance of 1/16" is obtained between brake lever (Item 6) and brake channel (Item 1).
- D. Observe brake operation by operating the proper toggle on pendant. Make sure the brake releases the instant it is pushed. If not, increase brake lever clearance slightly until this occurs.
- E. Replace brake guard.

### 4. DISASSEMBLY:

Disassembly of the brake can be accomplished without removing actuator from unit. However, if disassembly is to include brake channel (Item 1) and brake hub (Item 5), the oil should be drained from actuator.

#### A. Removal of Brake Assembly:

- (1) Remove brake guard (Item 8) by removing three # 10 pan HD screws (Item 9).
- (2) Remove the two brake wires to solenoid (Item 11).
- (3) Release brake assembly from brake system by removing

two 1/4-20 Allen head capscrews (Item 18).

- (4) Located on backside of brake assembly bracket (Item 2) are two # 10 flat HD screws (Item 16) which must be removed to replace brake solenoid (Item 11).
- (5) Remove small carburetor clip from brake lever anchor pin, compress brake band spring (Item 4) and lift off brake lever (Item 6).
- (6) Hold acorn nut (Item 13) and turn adjusting screw (Item 14) until separation. Then slide off washer (Item 22) and spring (Item 10).
- (7) To remove solenoid plunger from brake lever (Item 6) drive out pin (Item 10).

B. The remaining two items are attached to the actuator assembly and care should be taken during their removal to avoid damage to actuator.

- (1) Remove 1/4-20 Allen HD bolt (15). The brake hub (Item 5) is a press fit on actuator shaft; therefore, a small gear puller will be required for removal. Check Woodruff key (Item 21) for damage.
- (2) The brake channel (Item 1) is held in place by four 1/4-20 Hex HD capscrews that also hold bearing carrier for actuator shaft to actuator housing.

### 5. REASSEMBLY:

Assemble in reverse sequence to above.

- A. When brake hub has been removed, the proper relocation during assembly is approximately 1/32" past being flush with end of shaft.
- B. Do no fail to place a small amount of grease on the anchor pin and in the counter bore of the brake lever.
- C. Adjust brake per instructions and install brake guard (Item 8).

### 6. EMERGENCY MANUAL OPERATION:

In case of power failure, remove three #10x3/8 screws (Item 9) holding the brake cover (Item 8). Insert hand crank (Item 19) into the two holes in the brake hub. Release the brake by manually actuating brake solenoid with thumb or finger while turning crank. This will permit positioning the crane in stowed position until power can be restored.

#### \*BRAKE REPAIR

Brake Hub Assembly (Item 5) is subject to normal wear. As a result, the brake pad surface will become glazed and smooth over a period of time, depending upon usage of the crane and cause ineffective braking and increased coasting after the pendant switch is released.

The easiest way to repair the brake pad is as follows:

1. Remove brake guard (Item 8) by removing three # 10 pan head screws (Item 9).
2. Remove band and solenoid assembly by removing two 1/4-20 soc. head capscrews (Item 15).
3. Hold the solenoid and press the lever (Item 6) keeping the lever pressed to release the brake band (Item 4). Carefully pull the whole assembly away from the hub.
4. Brake Hub Assembly (Item 5) will now be visible for inspection. If the surface of pad is found to be glazed, hold a Vixon file or Emery cloth against the pad (braking surface) and run the particular motor by engaging pendant switch.
5. After the entire surface of the pad has been uniformly roughened, assemble in reverse sequence to above.