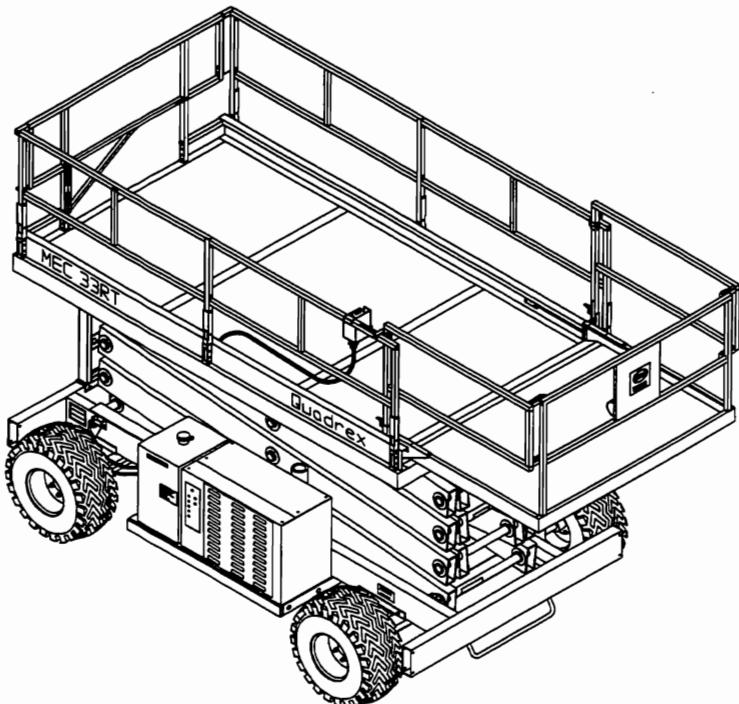


# **Quadrex RT**

## **SERIES**

### **25RT, 33RT**



**Mayville Engineering Company, Inc.**  
An Employee Owned Company

#### **Aerial Work Platforms**

210 Corporate Drive • Beaver Dam, WI 53916  
920-887-2518 • 1-800-387-4575  
Fax 920-887-2480 Sales  
Fax 920-887-2479 Service/Parts

[www.mayvl.com](http://www.mayvl.com)

# **Parts & Service Manual**

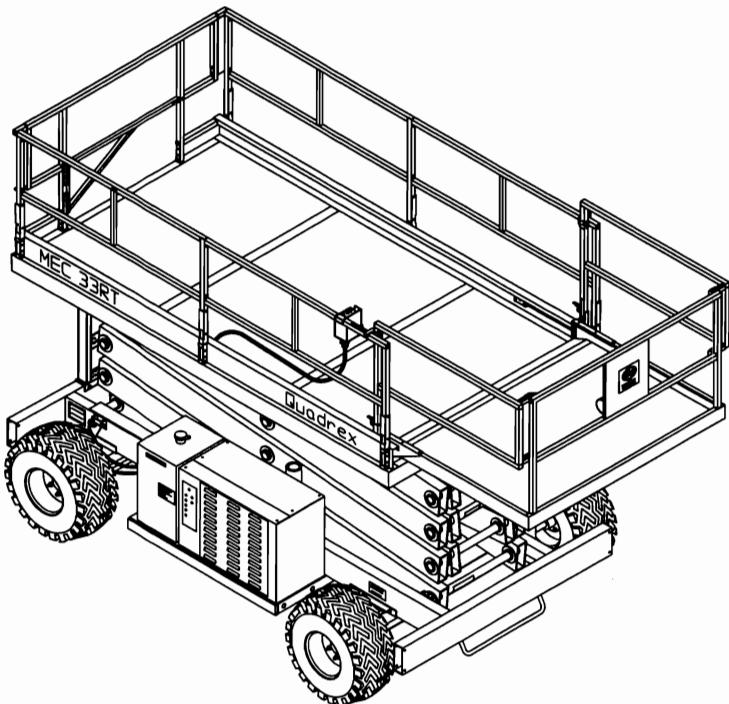
**Part Number 8983**



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# **Parts & Service Manual**

**Part Number 8983**





## Limited Owner Warranty

**Mayville Engineering Company, Inc. (MEC) warrants its equipment to the original purchaser against defects in material and/or workmanship under normal use and service for one (1) year from date of registered sale or date the unit left the factory if not registered. MEC further warrants the structural weldments of the main frame and scissor arms as defined in MEC's current Warranty Policy & Procedures, to be free from defects in material or workmanship for five (5) years from date of registered sale or date unit left the factory if not registered. Excluded from such warranty is the battery(s) which carries a ninety (90) day warranty from described purchase date and prorated thereafter up to one (1) year. Warranty claims within such warranty period shall be limited to repair or replacement, at MEC's option, of the defective part in question and labor to perform the necessary repair or replacement based on MEC's then current flat rate, provided the defective part in question is shipped prepaid to MEC and is found upon inspection by MEC to be defective in material and/or workmanship. Mayville Engineering Company, Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever. Use of other than factory authorized parts, misuse, improper maintenance or modification of the equipment voids this warranty. The foregoing warranty is exclusive and in lieu of all other warranties, express or implied. All such other warranties, including implied warranties of merchantability and of fitness for a particular purpose, are hereby excluded. No Dealer, Sales Representative, or other person purporting to act on behalf of MEC is authorized to alter the terms of this warranty, or in any manner assume on behalf of MEC any liability or obligation which exceeds MEC's obligations under this warranty.**



### **Read and Comply**

The ownership, use, service and/or maintenance of this machine is subject to various federal, state and local laws and regulations. It is the responsibility of the owner/user to be knowledgeable of these laws and regulations and to comply with them. Owner/user/operator must be familiar with Sections 6, 7, 8, 9 and 10 of ANSI A92.6 Standard. These sections contain the responsibilities of the owners, users, operators, lessors and lessees concerning safety, training, inspection, maintenance, application and operation.



## **WARNING**

**ANY MODIFICATION OF THIS MACHINE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER IS PROHIBITED. DO NOT REPLACE ANY COMPONENT OR PART WITH ANYTHING OTHER THAN ORIGINAL MEC REPLACEMENT PARTS WITHOUT THE MANUFACTURER'S CONSENT.**



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## **Service Parts Order Form**

### **Fax to 920-887-2479**

**Please fill out completely**

Date: \_\_\_\_\_

Account Number: \_\_\_\_\_

Bill To: \_\_\_\_\_

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Ordered By: \_\_\_\_\_

Your Fax No. \_\_\_\_\_

Ship To: \_\_\_\_\_

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## Purchase Order Number

**\*\* All orders MUST have Purchase Order Number**

## Ship VIA

**\*\*Fed Ex shipments require Fed Ex account number**

**All backordered parts will be shipped when available via the same ship method as original order unless noted below:**

- Ship complete order only - no backorders
  - Ship all available parts and contact customer on disposition of backordered parts
  - Other (please specify)

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**Specifications**

<b>Model</b>	<b>25RT</b>	<b>33RT</b>
<b>Height</b>		
Work Height	31' (9.5m)	39' (11.9m)
Platform Height (max)	25' (7.62m)	33' (10.06m)
Platform Height (min)	54.5" (1.38m)	62.5" (1.6m)
Overall Height	99" (2.5m)	107" (2.7m)
<b>Load Capacity</b>	1750# (794kg)	1250# (567kg)
<b>Speed</b>		
Lift/Lower	28 / 45 sec.	38 / 45 sec.
Travel	0 - 3 mph Proportional Control	
<b>Gradeability</b>	40%	40%
<b>Dimensions</b>		
Platform Size	74"x132" (1.89m x 3.35m)	74"x132" (1.89m x 3.35m)
Overall Length	138" (3.5m)	138" (3.5m)
Overall Width	86" (2.18m)	86" (2.18m)
Wheel Track	75.5" (1.92m)	75.5" (1.92m)
Wheel Base	88.5" (2.25m)	88.5" (2.25m)
Ground Clearance	9.5" (24cm)	9.5" (24cm)
Rollout Platform	48" long (1.22m)	48" long (1.22m)
Axle Pivot Dist.	6" (15.24cm)	6" (15.24cm)
<b>Gross Weight (Approx.)</b>	6950# (3152kg)	7300# (3311kg)
<b>Hydraulic Tank Cap.</b>	24 U.S. Gallons (91 liters)	
<b>Fuel Tank Capacity</b>	16 U.S. Gallons (61 liters)	
<b>Power</b>	23 HP Kubota Liquid Cooled - Gas	
<b>Tires</b>	26" x 12" x 12" Standard 31" x 15" x 15" Optional	

## 1. MAINTENANCE

### NOTE

Refer to Engine Owner's Manual for engine maintenance instructions.

### GENERAL

This machine requires only minimum of routine, pre-operation maintenance. Required visual inspections are described in a following topic. These inspections must be made without fail, and all necessary corrections made before operating the machine. Fluid level checks and periodic lubrication comprise the remaining routine, pre-operation, maintenance. These topics are covered below.

### FLUID LEVEL CHECKS

#### **⚠ WARNING**

**Check engine coolant level only after engine has cooled. You should be able to touch the radiator without discomfort before removing the radiator cap. If radiator cap is removed while the coolant is at normal operating temperature, pressure within the coolant system will force hot liquid out through the filler opening, and possibly cause severe scalding.**

#### 1. Engine Coolant Level

- A. Slowly remove radiator cap, allowing any trapped pressure to escape safely.
- B. Note level of coolant in the radiator. Coolant should cover the radiator core. If not, add anti-freeze of the brand presently used in the coolant system, or a mixture of anti-freeze and water in the recommended proportion (50-50 mixture).

#### **⚠ WARNING**

**Stop engine before filling.**

#### 1. Gasoline

Fill the gasoline tank (Fig. 1-1) to the bottom of the neck, with clean lead free regular gasoline. Use all necessary precautions regarding the handling of gasoline.

#### 2. Hydraulic Fluid

- A. Make sure machine is parked on a level surface, and platform is fully lowered.
- B. Stop engine.
- C. Clean filler cap and surrounding area of all dirt and other contaminants; and then remove filler cap (Fig 1-2).
- D. Check to be sure that fluid level in the tank is approximately two (2) inches below the top of the tank.
- E. If hydraulic fluid level is low, add oil (conforming to MIL SPEC. 005606) to bring it to the prescribed level.

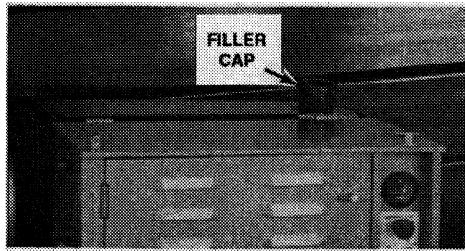


Figure 1-1 Gasoline Tank Filler

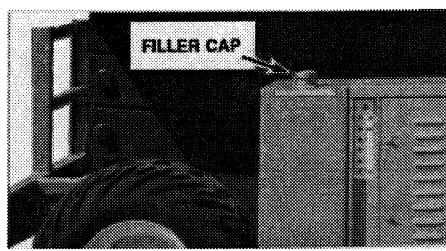


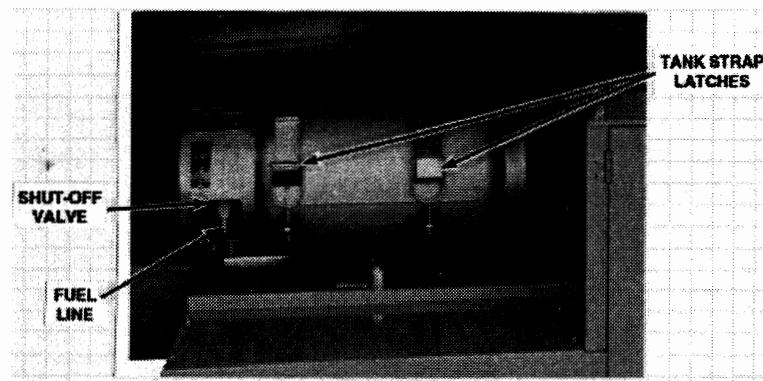
Figure 1-2 Hydraulic Tank Filler

## 1. Changing LPG Tank

### NOTE

**The replacement tank must contain fuel manufactured to Natural Gas Processors Association Specification HD-5. No other fuel is Recommended for use in this engine.**

- A. Close LPG fuel shutoff valve (Fig. 1-3).
- B. Start engine (on LPG fuel) and allow it to run until it stops, thereby purging the fuel lines of fuel.
- C. Disconnect fuel line from shutoff valve.
- D. Release tank strap latches (Fig. 1-3), and carefully lift tank from its bracket.
- E. Place new tank on bracket, aligning holes in tank collar with pins on front of mounting bracket.
- F. Secure tank strap latches.
- G. Connect fuel line to fuel shutoff valve on tank.
- H. Open fuel shutoff valve.
- I. Use soap water solution to check fuel line connection at shutoff valve for leaks. Immediately correct any leak, by further tightening connection.



**Figure 1-3 LPG Tank**

## TIRE INFLATION

### NOTE

**Applies only to machines with pneumatic tires.**

Tire inflation pressure must be maintained at tire manufacturer's recommended specification (See tire sidewall). Check tire pressure daily, before each operating shift. Low tire inflation pressure accelerates tire wear; but, more importantly, can have an adverse affect on machine stability. It is also important to keep the inflation pressure equal in all four tires.

## INSPECTION AND LUBRICATION

### 1. Structural Inspection

- A. Check machine for bent structural members (Beams, main frame, platform, pivot pins, etc.). Machines which have been overloaded could have bent members and fatigued pivot pins. Replace all bent members and pins to insure a safe operating machine.
- B. Check bushings in scissor beams for broken or cracked welds. Replace beams if bushing welds are cracked or bushings are elongated.

### 2. Lubrication

Besides changing engine oil (see engine service manual), the only periodic lubrication required is to oil the steering and brake pivot points once a week. Apply a few drops of EP90 gear oil to each pivot point (Figures 1-4 and 1-5).

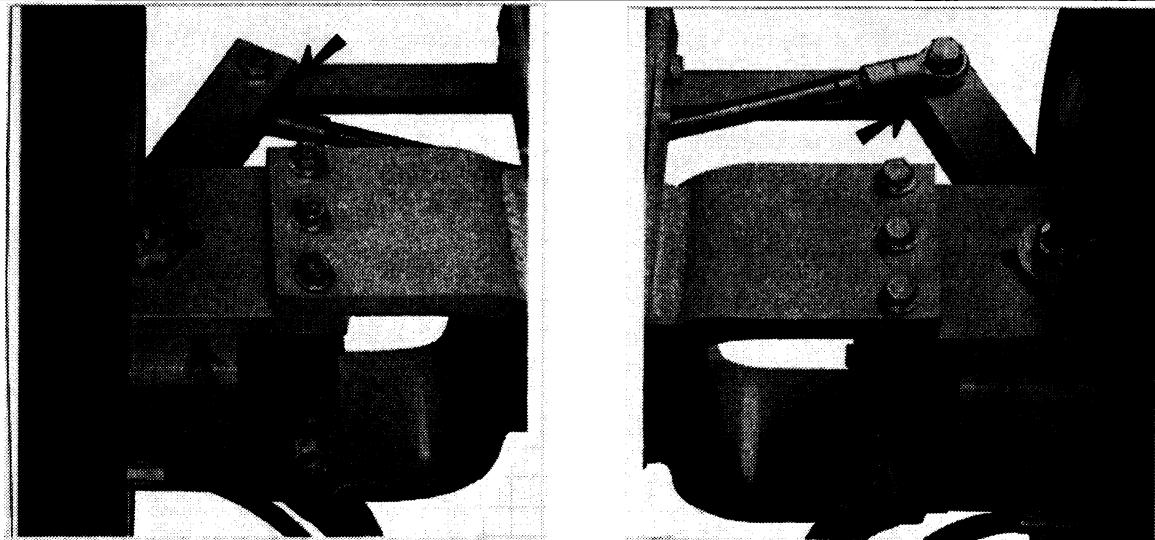


Figure 1-4 Front Axle Lubrication

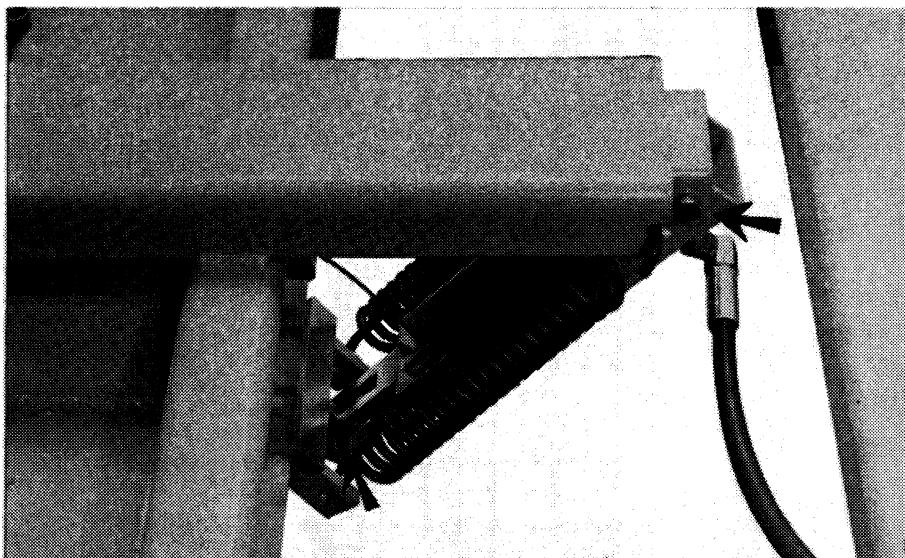


Figure 1-5 Brake Linkage Lubrication

## ⚠ WARNING

All pivot areas of scissors and lift cylinder must be checked for wear. A loud scraping noise indicates that the D.U. bearings are damaged and need replacing. Failure to do so will result in extensive damage to structural members and bushings which would create a hazardous condition and could result in injury or death to personnel.

## CHECKLISTS

### Frequent Inspection Check-

Some of the components may or may not affect your particular machine. Check all that apply.

	Legible, Operational and/or Physically Correct	Not Legible, Opera- tional and/ or Physi-	Corrected or Repairs Made to Unit
<b>Wheels</b>  Rims - Corrosion, Cracks, Bends etc.			
<b>Tires</b>  Excessive Wear/Damage Tire Pressure			
<b>Battery</b>  Check Wiring Check Fluid Level Inspect Commutator and Brushes			
<b>Hydraulics</b>  Check Hoses Check Fittings Replace Oil Filter			
<b>Scissors</b>  Check for Damage ie: Corrosion, cracks, Bends etc. Maintenance Locks			
<b>Drive and Lift Mechanism</b>  Oil Steering Pivot Pins Oil Brake Pivot Plns Grease Rear Spindles			
<b>Main Frame</b>  Check Structure ie: corrosion, cracks, bends etc. Check Pivot Pins Check All Fasteners			
<b>Control System</b>  Damage to Switches, Indicators and Guards Check Terminals and Plugs Check Cords			
<b>Safety Decals</b>  Decals in Place and Legible			

**Figure 1-6 Inspection Schedule**

**CHECKLISTS****Frequent Inspection Checklist Cont'd**

	Legible, Operational and/or Physically Correct	Not Legible, Opera- tional and/ or Physi-	Corrected or Repairs Made to Unit
<b>Platform</b>			
Rear Closure			
Railing Secure in Pockets			
All Fasteners Secure			
Railings Not Bent			
Proper Written Materials in Case			
<b>Fuel System</b>			
Check for Leaks (LPG or Gasoline)			
Check Hoses			
<b>Functions</b>			
Base/Upper Control Box			
Steer: Left/Right			
Drive: Forward/Reverse			
Hi Torque/High Speed			
Fast Speed Cut Out When Platform is Elevated			
Emergency Down			
Platform Raises to Full Extension			
Brakes Operational			
Emergency Stop			
Pothole System Operational			

**Comments:****Signature/Inspectors****Date:**

Reproduce Form as Needed. Save completed forms for future reference.

**Figure 1-7 Inspection Schedule**



## SERVICING, REPLACEMENT AND ADJUSTMENTS

This section contains three basic maintenance functions:

**SERVICING** describes items to be checked and serviced when necessary, on a daily basis, or prior to using the unit after it has been out of service for a period of time.

**REPLACEMENT** describes the proper method for removal and installation of replaceable components in case of failure.

**ADJUSTMENT** describes any adjustments necessary to ensure proper operation of the unit or adjustments required after the replacement of components, if necessary.

### NOTE

**CAPSCREW REPLACEMENT:** Any replacement capscrew should be of **SAME grade or greater than the original**. Any questions, call the factory for verification.

### 1. Hydraulic System

#### A. General Information

The following are important points to keep in mind when working on the hydraulic system or its components:

- (1) All mechanical devices have limits of strength and durability. To avoid failure of hydraulic components, pressure relief valves are included in the drive, steering and platform raise circuits.
- (2) Keep the hydraulic fluid as clean as possible during storage and use. Add fluid to reservoir only through the filler opening, using a clean funnel. Never use a cloth to strain the fluid, since cloth tends to release lint and lint in the fluid can plug fine passages in the components. Failure of a hydraulic system component will most likely result in contamination of the hydraulic fluid. If a failure occurs, drain and flush the entire system, and replace the filter cartridge. Remove suction line strainer (clean by washing in solvent).
- (3) After disassembly, wash all metal parts in a clean, mineral-based solvent. Thoroughly clean all internal passages.
- (4) Discard all o-rings and seals, regardless of reason for removing them. Install new o-rings and seals during reassembly. Use a small amount of petroleum jelly to hold o-rings in place during assembly.
- (5) Make certain that all hydraulic connections are tight following component installation. A loose pressure line will allow fluid to escape. A loose suction line will allow air to enter the system. Air in the system can result in noisy or erratic operation, and even cause component damage.

#### B. Maintenance

Three basic maintenance procedures have the greatest impact on hydraulic system performance, efficiency and life span. These three are:

- (1) Change filter at the recommended intervals.
- (2) Keep fluid at the proper level in the reservoir at all times.
- (3) Keep line connections tight, but not to the point of distortion. Air must be excluded from the system.

#### C. Hydraulic system Bleeding

The hydraulic system is self-bleeding. After the system has been drained, such as during the replacement of a hydraulic component, actuate the platform full up and down for six cycles and recheck the reservoir fluid level each time after lowering. Add fluid as required.

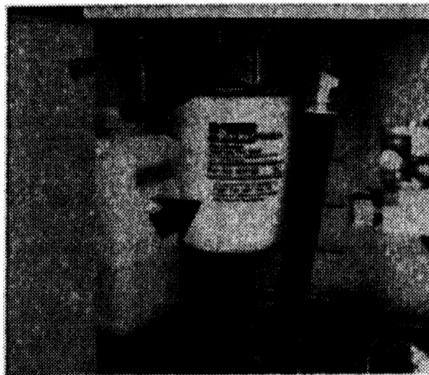


Figure 1-8 Spin On Hydraulic Filter

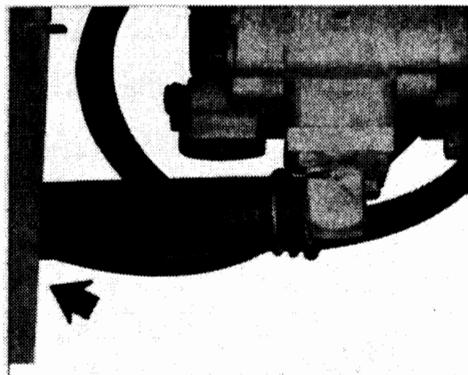


Figure 1-9 Location Suction Line Strainer

D. Spin-On Filter Replacement

The spin-on filter in the hydraulic system should be changed yearly (Fig 1-8).

E. At each hydraulic oil change interval, remove and clean the suction line strainer (Fig. 1-9).

F. Check and Fill Hydraulic Reservoir.

Inspect oil level in hydraulic reservoir by unscrewing reservoir filler cap (Fig. 1-2). Oil level should be 2 inches below the top of the tank. Fill reservoir with hydraulic fluid conforming to MIL. SPEC. O-5606.

G. Hydraulic Pump Replacement

- (1) Remove hydraulic hoses from pump.

**NOTE**

**The high pressure line may still be under pressure and fluid will squirt out when line is disconnected. Do not reuse fluid, as it may be contaminated.**

- (2) Remove two capscrews and nuts securing pump to bracket.

- (3) Remove pump from bracket.

**NOTE**

**When reinstalling pump, grease spline with high-pressure grease.**

- (4) Install pump and connect hoses.

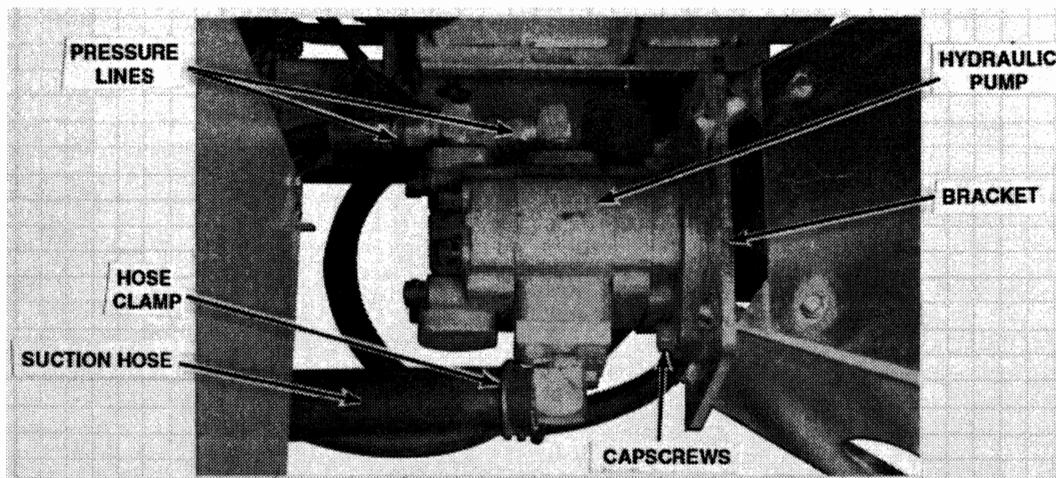


Figure 1-10 Hydraulic Pump

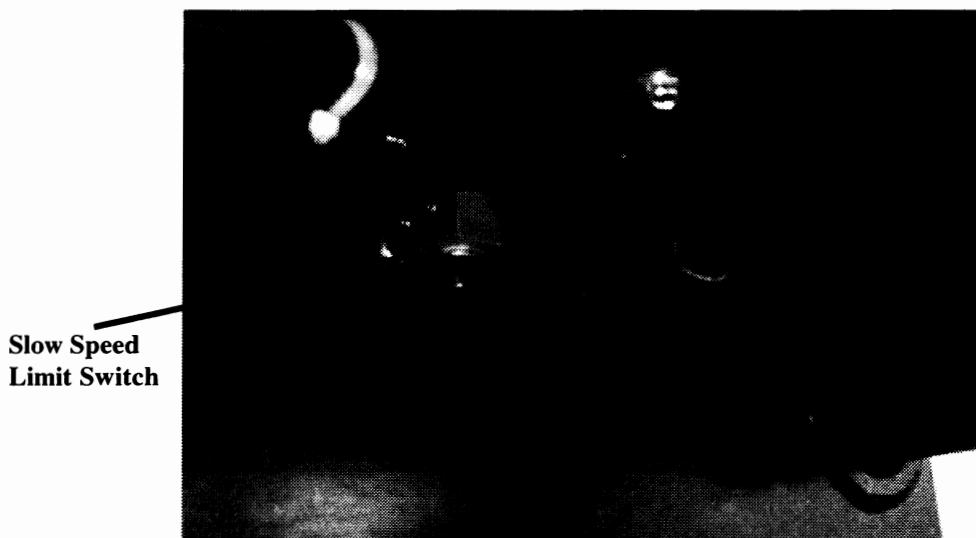


Figure 1-11 Slow Speed Limit Switch

**2. Slow Speed Adjustment**

- A. Raise platform approximately six (6) feet.
- B. Adjust switch in or out to activate circuit at this height. Slow speed circuit will be energized when platform reaches this height, allowing machine to travel in slow speed only.

**3. Brake Adjustment**

- A. Release the brakes by activating the drive system and pulling the brake lock cable.
- B. Raise rear of machine enough that tires clear the floor. NOTE: Both rear wheel wheels brakes have to be adjusted the same.

**4. Hydraulic Lift Cylinder Replacement.**

**WARNING**

**MAINTENANCE LOCKS MUST BE INSTALLED when maintaining or servicing machine with platform raised.**

**Working through beams on scissor lifting device creates a hazardous situation which could cause death or personal injury.**

- A. Raise platform.
- B. Engage maintenance locks.
- C. Lower platform until beam assemblies rest on maintenance locks.

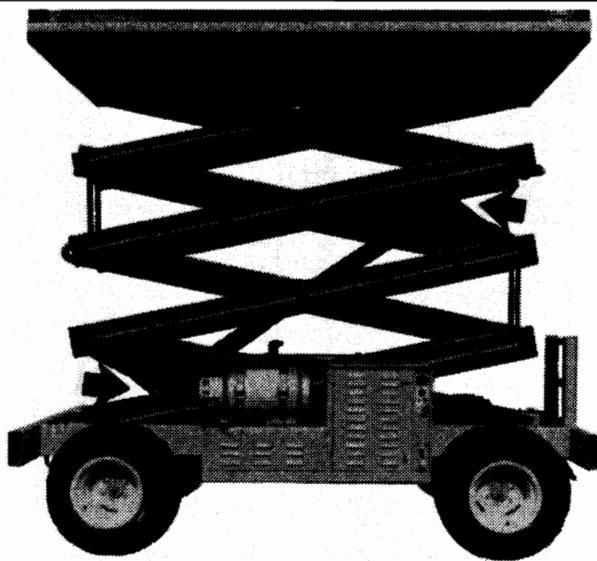


Figure 1-12 Removing Lift Cylinder Pins and Retainers

- D. Remove cylinder pin retainer plates an both sides of cylinder mounting (top and bottom) (Fig 1-12).
- E. Wrap a self-tightening strap around center of the cylinder (Fig. 1-13).
- F. With the help of a lifting device, apply upward pressure.
- G. Remove low-pressure hoses and high-pressure hose from lower end of cylinder and emergency down assembly.
- H. Remove top cylinder pin and bottom cylinder pin.
- I. Raise cylinder up and out of machine.
- J. Replace cylinder in reverse order of removal.
- K. Bleed air from system as described in the hydraulic system (Item 1 Section C).

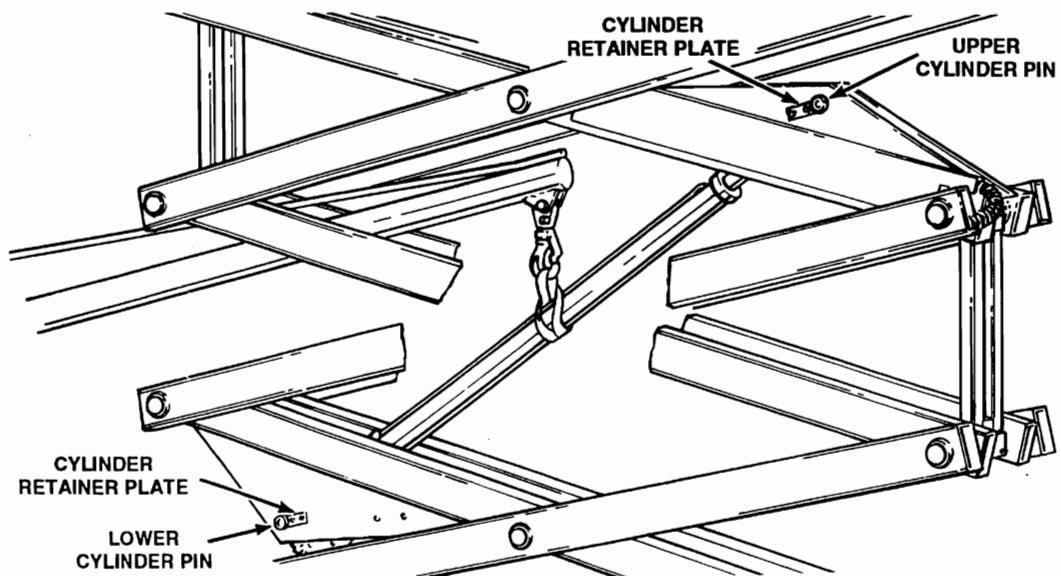
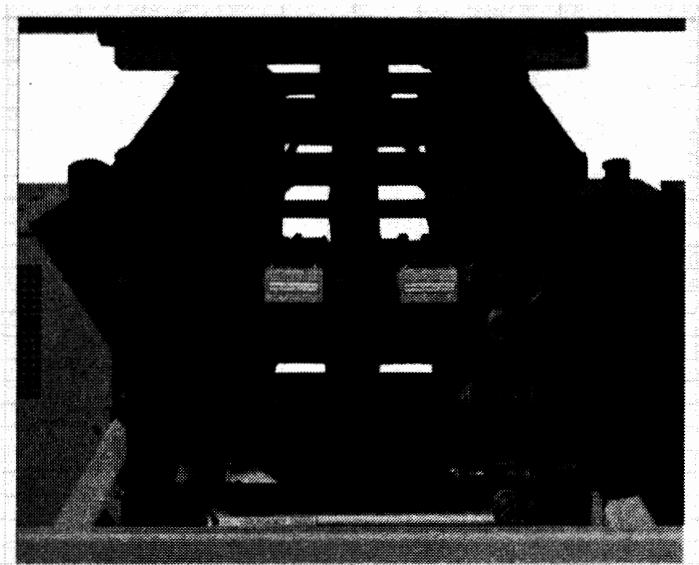


Figure 1-13 Removing Lift Cylinder



**Figure 1-14 Beam Replacement**

#### **5. Outer Beams and Inner Beam Assembly Replacement**

Beam replacement is a critical procedure to be performed only by factory trained and authorized personnel (Fig. 1-14).

#### **6. LPG Fuel System**

### **⚠ WARNING**

**Before disconnecting any line or component in the LPG fuel system, make sure that all the fuel trapped between the tank and the engine has been used up. To insure this, close the shut off valve on the LPG tank (Figure 13) and then start the engine on LPG. Allow the engine to run until the trapped fuel has been consumed and the engine stops. The trapped fuel is under pressure, and opening any connection in the system will allow the gas to escape at high velocity. The escaping gas can cause severe eye injury, or can propel a fitting or hose at a velocity sufficient to cause bodily injury. Use extreme care when performing maintenance work on the LPG maintenance system.**

The LPG fuel system components are identified in the Parts Catalog of this manual. If replacement of a component is necessary, use the Parts Catalog figure as a guide.

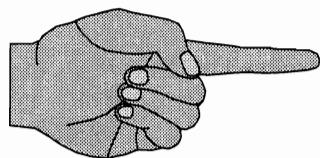
After replacing a component and/or reconnecting a line, test the connection for leaks using an LPG Leakage Tester or equal device. Correct any leakage before returning the machine to operation.

#### **7. Gasoline Fuel System**

The gasoline fuel system components are identified in the Parts Catalog section of this manual. If replacement of a gasoline fuel system component is necessary, use the Parts Catalog figures as a guide.

Refer to Engine Service Manual for information on the carburetor and intake manifold.

# Notes:



**Next Page**

## Troubleshooting



## **⚠ WARNING**

**MAINTENANCE LOCKS MUST BE INSTALLED when maintaining or servicing machine with platform raised.**

**Working through beams on scissor lifting device creates a hazardous situation which could cause death or personal injury.**

**Platform will not raise.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Hydraulic fluid level low.	1. Add fluid (see Maintenance section).
2. Pump cavitation caused by improper fluid for temperature conditions.	1. Drain reservoir and bleed system. Use only recommended type fluids (see Maintenance section).
3. Defective up valve, valve coil, relay or fuse.	1. Replace up valve, valve coil, printed circuit board or fuse.
4. Defective down valve.	1. Replace down valve.
5. Electrical circuitry defective.	1. Refer to electrical schematic.



Raising speed slow or erratic.

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Loose connections in electrical circuitry.	1. Perform visual inspection and ensure all connections are secure.
2. Momentary short in wiring.	1. Refer to electrical schematic.
3. Bent structural members.	1. Have damaged members replaced as necessary (see visual structural inspection in Maintenance section).
4. Restriction in hydraulic hose.	1. Replace hydraulic hose.
5. Defective or jammed seals in hydraulic lift cylinder.	1. Replace hydraulic cylinder.
6. Pump worn or damaged.	1. Replace pump (see Maintenance section).
7. Defective up or down valve.	1. Check valves on cylinder and manifold.
8. Loose intake hose connection.	1. Tighten connection.
9. Defective emergency down valve.	1. Replace valve.

Lowering speed slow.

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Flow control valve misadjusted.	1. Adjust (see Maintenance section).
2. Friction in structural members.	1. Check for damaged members and cracked welds (see Maintenance section). 2. Have damaged members replaced as necessary. This is to be done by factory authorized personnel only.
3. Obstruction in hydraulic hose.	1. Replace hose.
4. Defective down valve.	1. Replace valve.



**Platform will not lower.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Voltage not applied to down valve coil.	1. Check fuses. 2. Check battery charge. 3. Check electrical circuitry. Refer to electrical schematic.
2. Defective down valve.	1. Replace valve.

**Platform creeps down.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Defective emergency down valve.	1. Replace valve.
2. Defective down valve.	1. Replace valve.
3. Damaged seal in lift cylinder.	1. Replace hydraulic cylinder (see Maintenance section) or replace seals.

**No motion in either drive direction.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Defective FORWARD/REVERSE switch.	1. Replace forward/reverse switch.
2. Defective drive valve, relay or fuse.	1. Replace drive valve, printed circuit board or fuse.
3. Defective electrical circuitry.	1. Refer to electrical schematic.
4. Misadjusted or defective brake.	1. Adjust or repair brakes (see Maintenance section).

**No motion in one drive direction only.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Defective FORWARD/REVERSE valve or valve coil.	1. Replace defective valve or coil.
2. Defective electrical circuitry.	1. Refer to electrical schematic.



**High Speed drive function inoperative (right wheel only).**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Defective electrical circuitry.	1. Refer to electrical schematic.
2. Defective power valve (secondary manifold).	1. Replace power valve (V3).
3. Defective drive valve, coil, relay or fuse.	1. Replace defective part.

**Machine travels in fast speed when platform is above 6 feet.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Misadjusted or defective SLOW SPEED switch.	1. Adjust or replace switch.
2. Defective electrical circuitry.	1. Refer to electrical schematic.
3. Defective slow speed valve, coil, relay, fuse or SLOW SPEED switch.	1. Replace valve, coil, relay, fuse or switch.

**Brakes do not release.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Defective brake valve.	1. Replace valve.
2. Brake pads misadjusted.	1. Adjust brakes (see Maintenance section).
3. Defective brake cylinder.	1. Replace cylinder.
4. Contamination lodged in brake orifice.	1. Remove contamination.

**Brakes do not set.**

POSSIBLE CAUSES	REPAIR PROCEDURE
1. Misadjusted brake linings.	1. Adjust brake (see Maintenance section).
2. Defective brake valve.	1. Replace.
3. Defective electrical circuitry.	1. Refer to electrical schematic.

**Steering inoperative.**

<b>POSSIBLE CAUSES</b>	<b>REPAIR PROCEDURE</b>
1. Defective electrical circuitry.	1. Refer to electrical schematic.
2. Defective steering valve, coil, relay or fuse.	1. Replace steering valve, coil, printed circuit board or fuse.
3. Defective steering cylinder.	1. Replace steering cylinder.
4. Defective crossover relief valve.	1. Replace valve.
5. Contamination lodged in steering orifice.	1. Remove contamination.

**Engine will not start.**

<b>POSSIBLE CAUSES</b>	<b>REPAIR PROCEDURE</b>
1. FUEL CHANGEOVER switch set to OFF.	1. Position switch to desired fuel.
2. Battery dead.	1. Change or replace battery.
3. Engine problems.	1. Refer to ENGINE OWNER'S MANUAL.

**Engine runs poorly.**

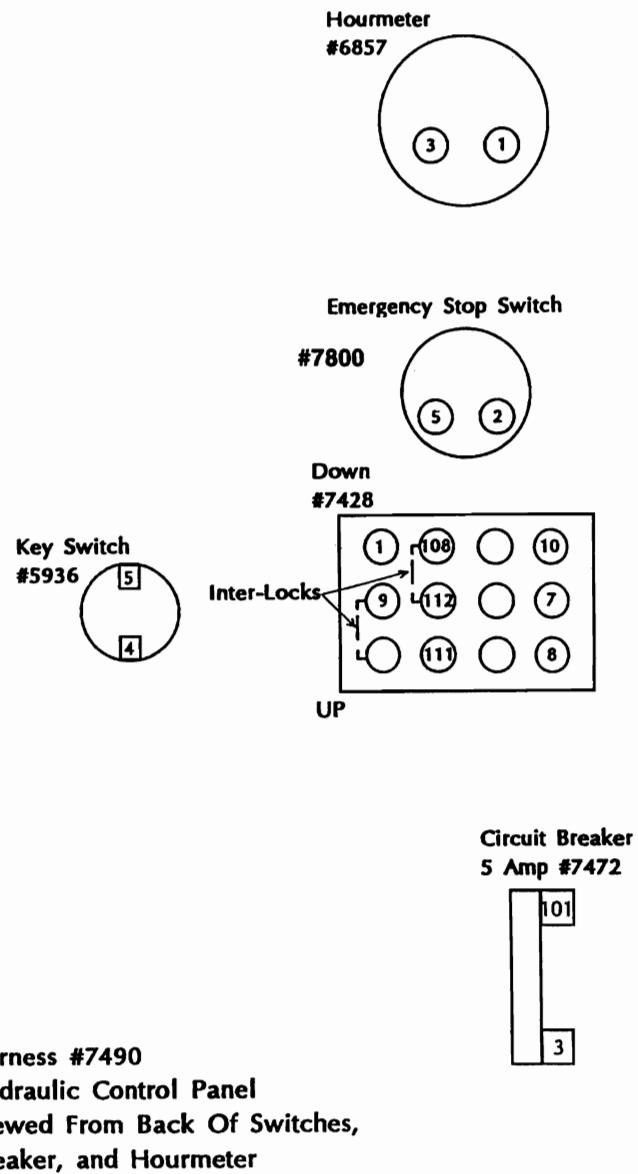
<b>POSSIBLE CAUSES</b>	<b>REPAIR PROCEDURE</b>
1. LPG carburation out of adjustment.	1. Adjust carburation system (see Maintenance section).
2. Gasoline carburation out of adjustment.	1. Refer to ENGINE OWNER'S MANUAL.
3. Engine problems.	1. Refer to ENGINE OWNER'S MANUAL.

**Generator does not produce power.**

<b>POSSIBLE CAUSES</b>	<b>REPAIR PROCEDURE</b>
1. Defective generator ON-OFF switch.	1. Replace switch.
2. Defective generator drive motor.	1. Replace drive motor.
3. Defective generator control valve or valve coil.	1. Replace valve or valve coil.
4. Generator problems.	1. Refer to GENERATOR OPERATING MANUAL.

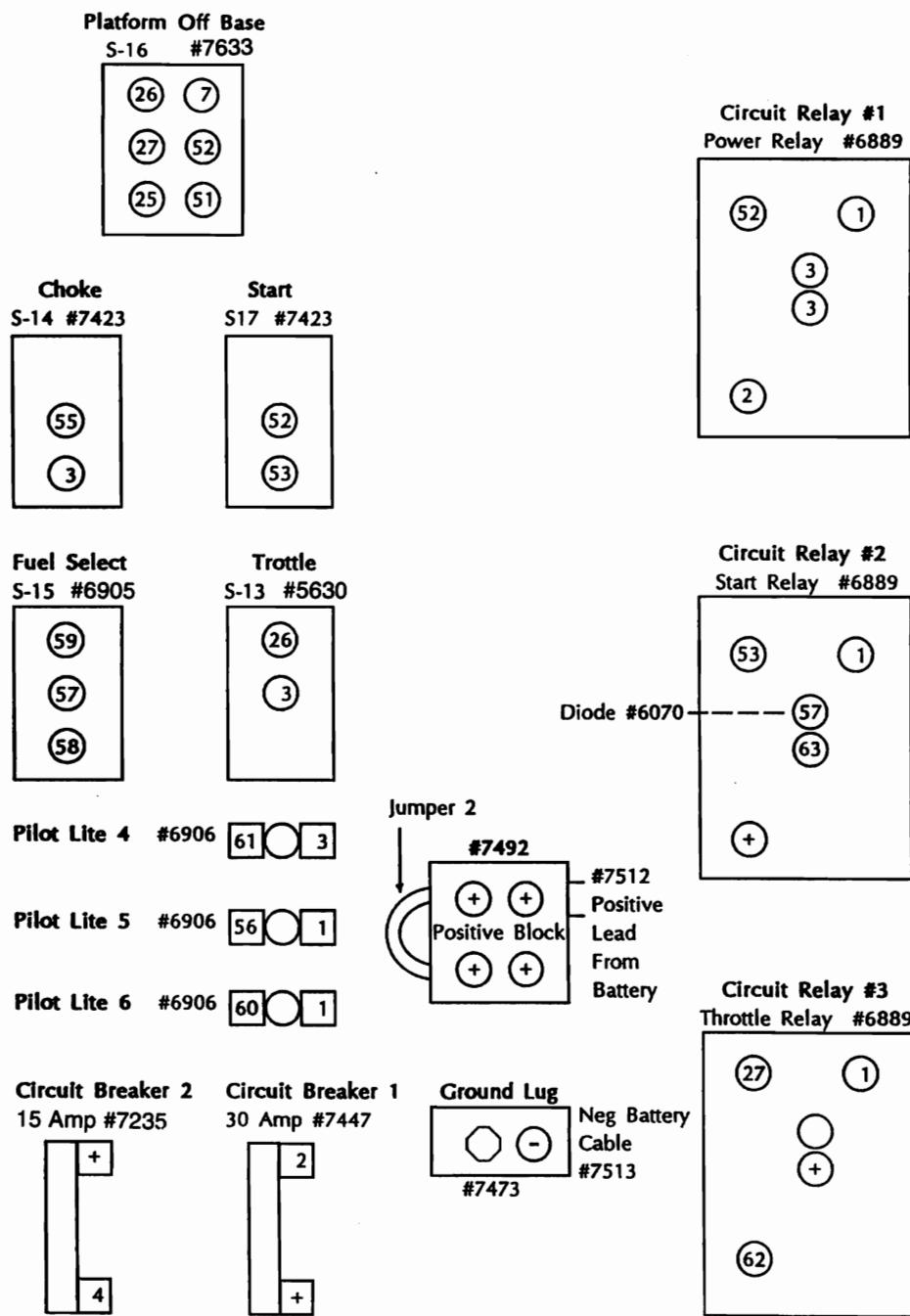
## Figure 2A - Lower Control Panel Wiring

BULK HEAD MANIFOLD COMPARTMENT  
SHOWING BACK SIDE OF SWITCHES, BREAKER, AND HOURMETER

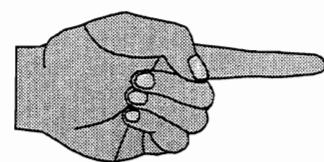


## Figure 2B - Engine Control Panel Wiring

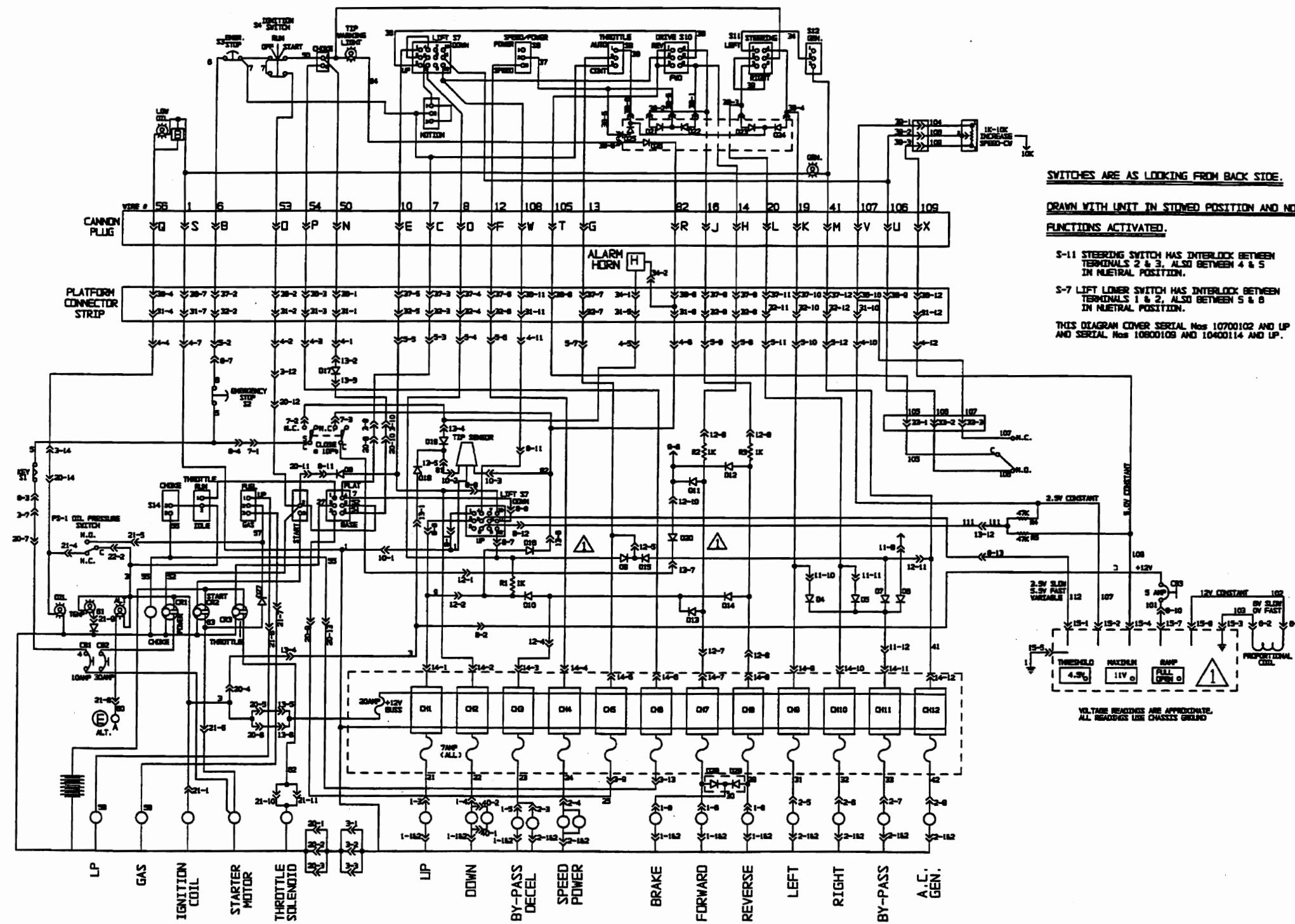
BULK HEAD ENGINE COMPARTMENT  
SHOWING BACK SIDE OF SWITCHES, PILOT LIGHTS, AND BREAKERS



# Notes:



Next Page

**Figure 2C**DUAL FUEL ELECTRICAL WIRING DIAGRAM WITH MOTION SWITCH  
QUADREX MODELS 25RT & 33RT

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Figure 2D

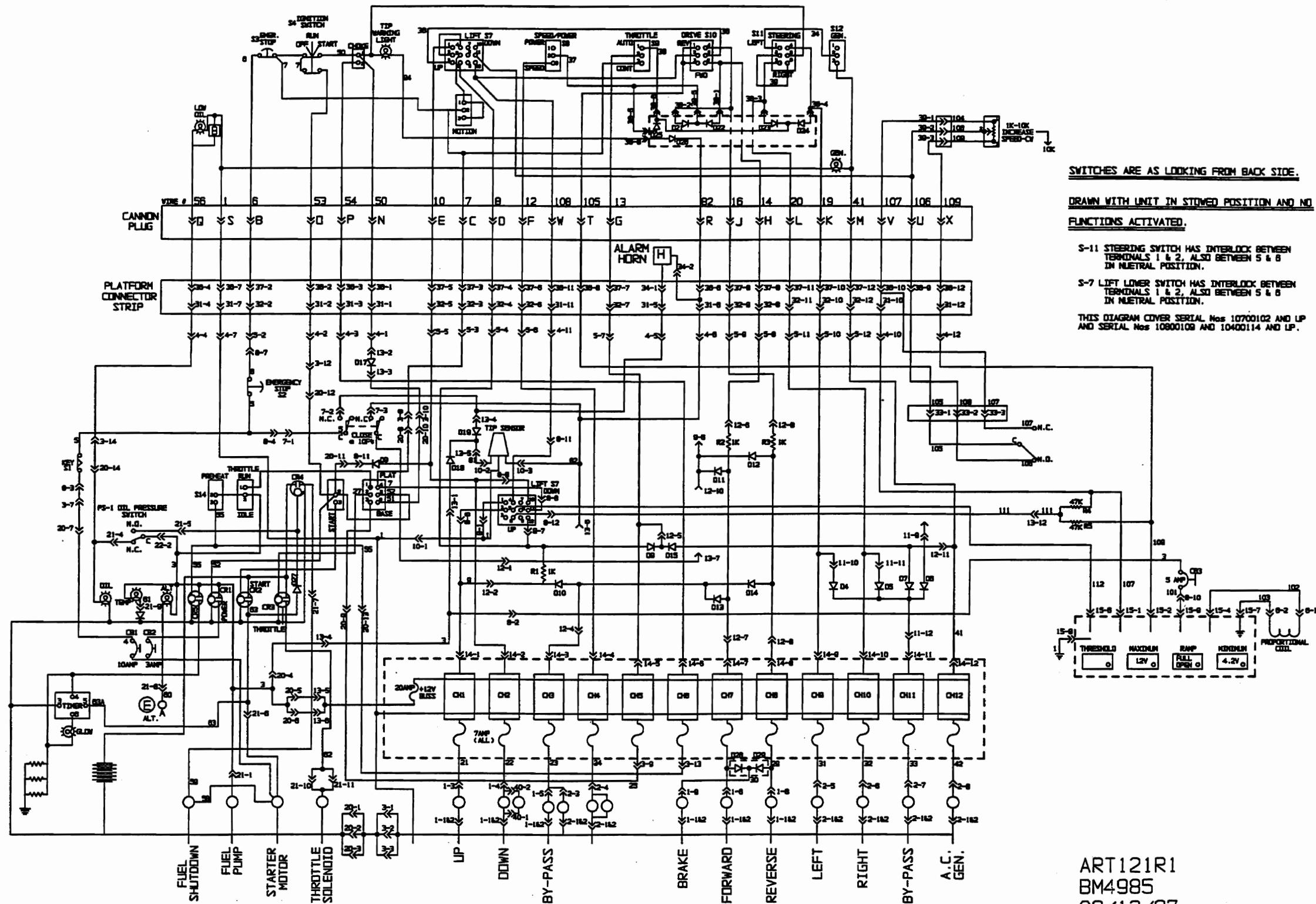
DIESEL ELECTRICAL WIRING DIAGRAM WITH MOTION SWITCH  
QUADREX MODELS 25RT & 33RT

Figure 2E

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT &amp; 33RT

FOR FIELD UNIT UPGRADED FROM TOGGLE BOX TO JOYSTICK  
BEFORE APRIL 1, 1996 WITH AND WITHOUT OPTIONAL ANTI-RESTART KEY SWITCH KIT 20039

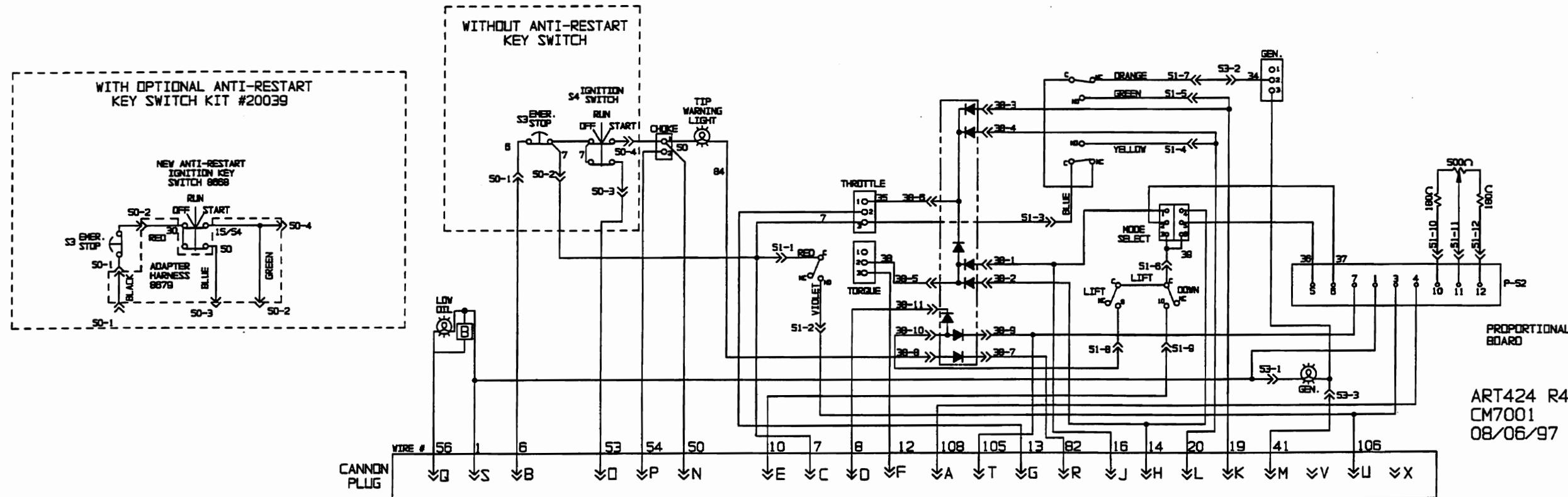
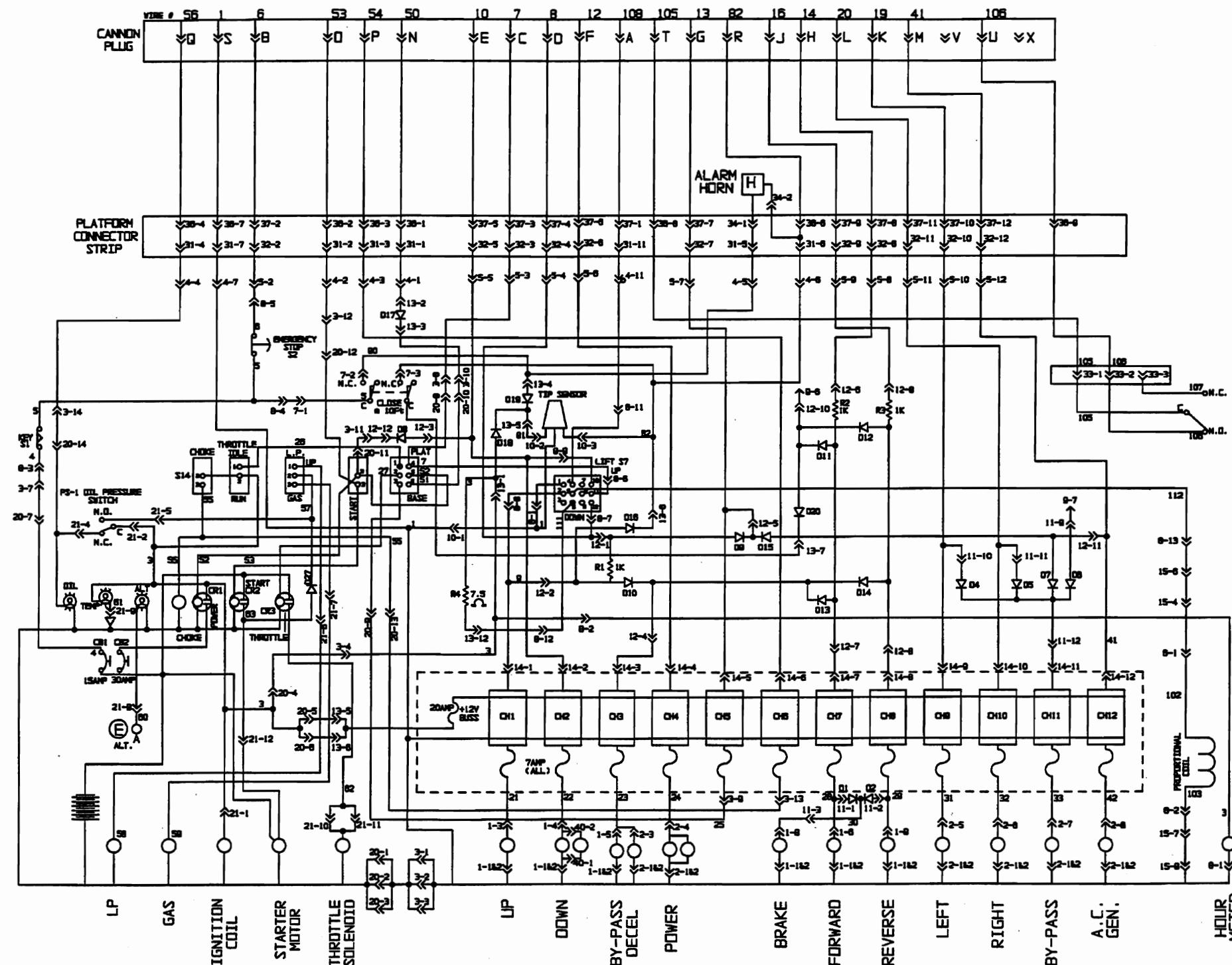


Figure 2F

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT &amp; 33RT

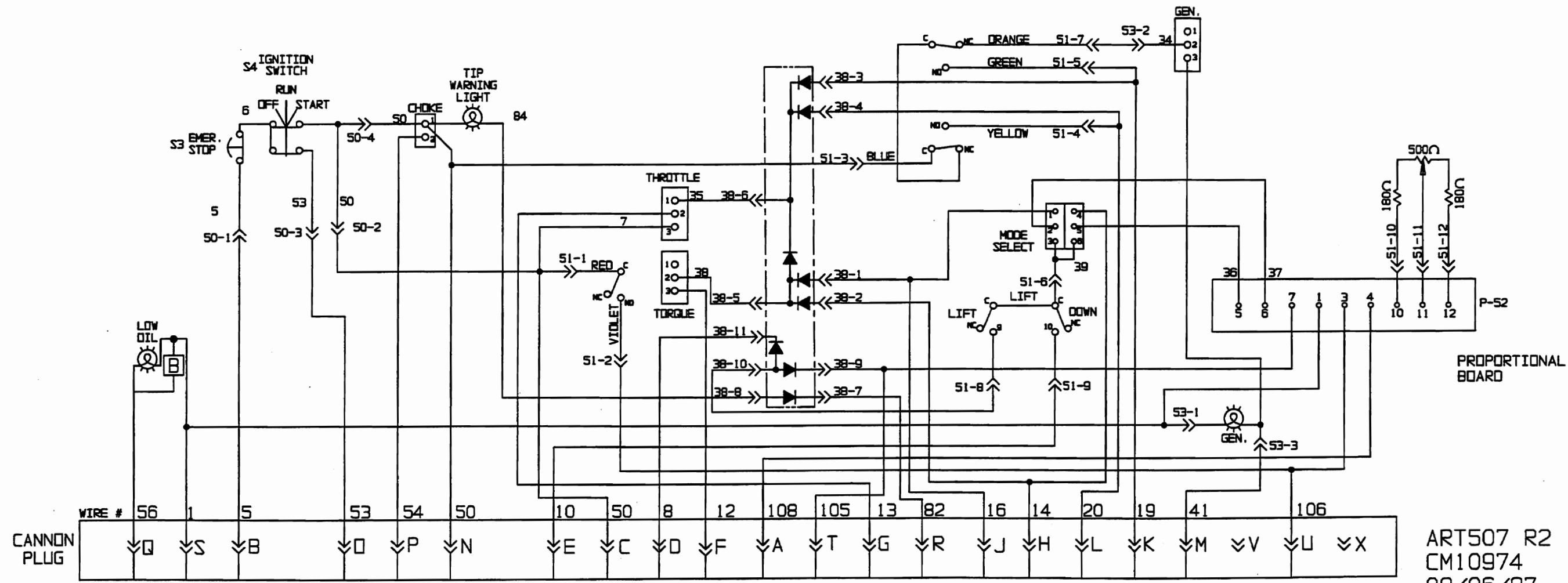
FOR FIELD UNIT UPGRADED FROM TOGGLE BOX TO JOYSTICK  
BEFORE APRIL 1, 1996 WITH AND WITHOUT OPTIONAL ANTI-RESTART KEY SWITCH KIT 20039

**Figure 2G**

# DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

## QUADREX MODELS 25RT & 33RT

FOR FIELD UNIT UPGRADED FROM TOGGLE BOX TO JOYSTICK  
AFTER APRIL 1, 1996 WITH STANDARD ANTI-RESTART KEY SWITCH



ART507 R2  
CM10974  
08/06/97

**Figure 2H**

**DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK**  
**QUADREX MODELS 25RT & 33RT**

FOR FIELD UNIT UPGRADED FROM TOGGLE BOX TO JOYSTICK  
AFTER APRIL 1, 1996 WITH STANDARD ANTI-RESTART KEY SWITCH

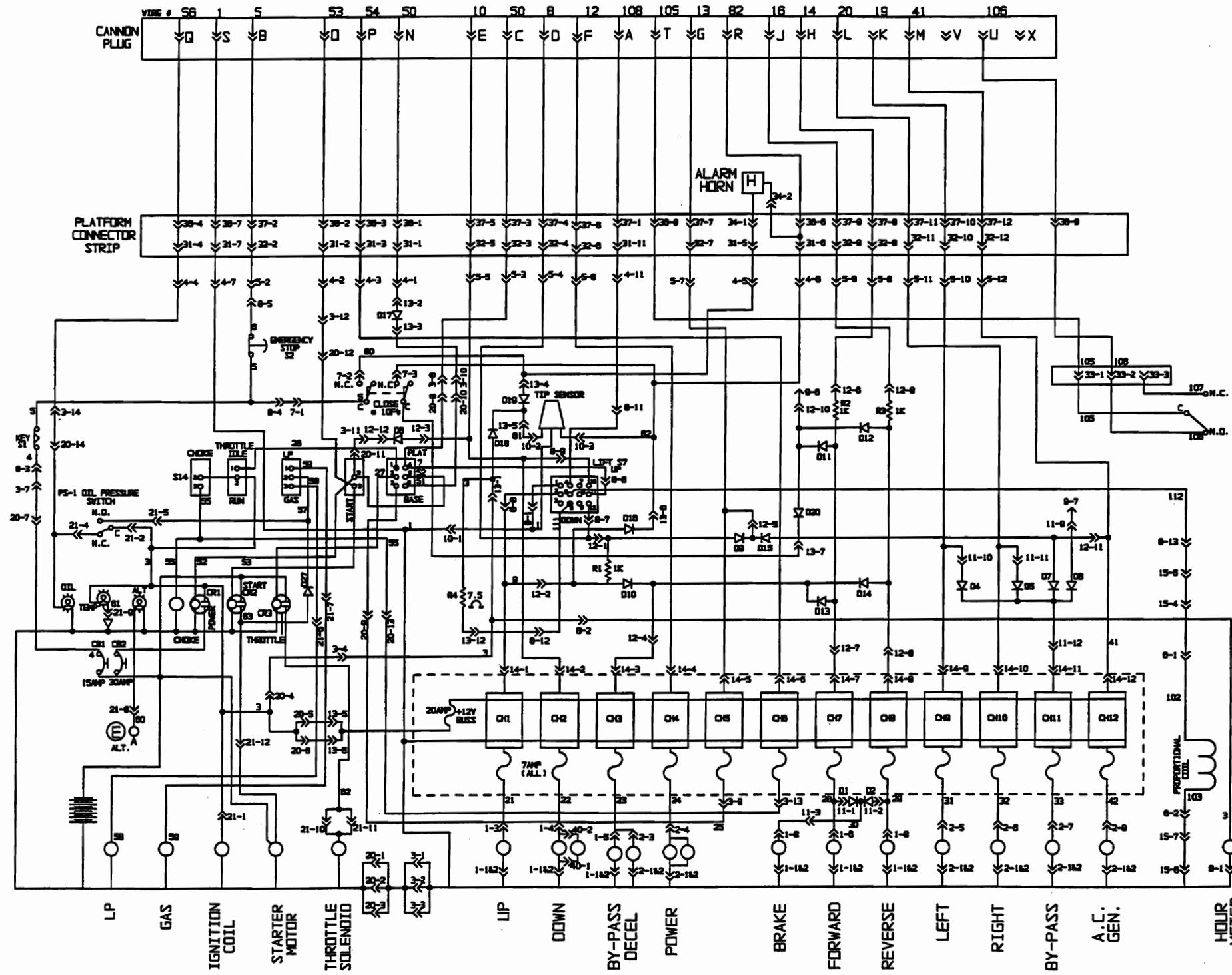


Figure 2I

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10700167 THROUGH #10700226  
 FOR PRODUCTION UNITS SERIAL #10800215 THROUGH #10800315

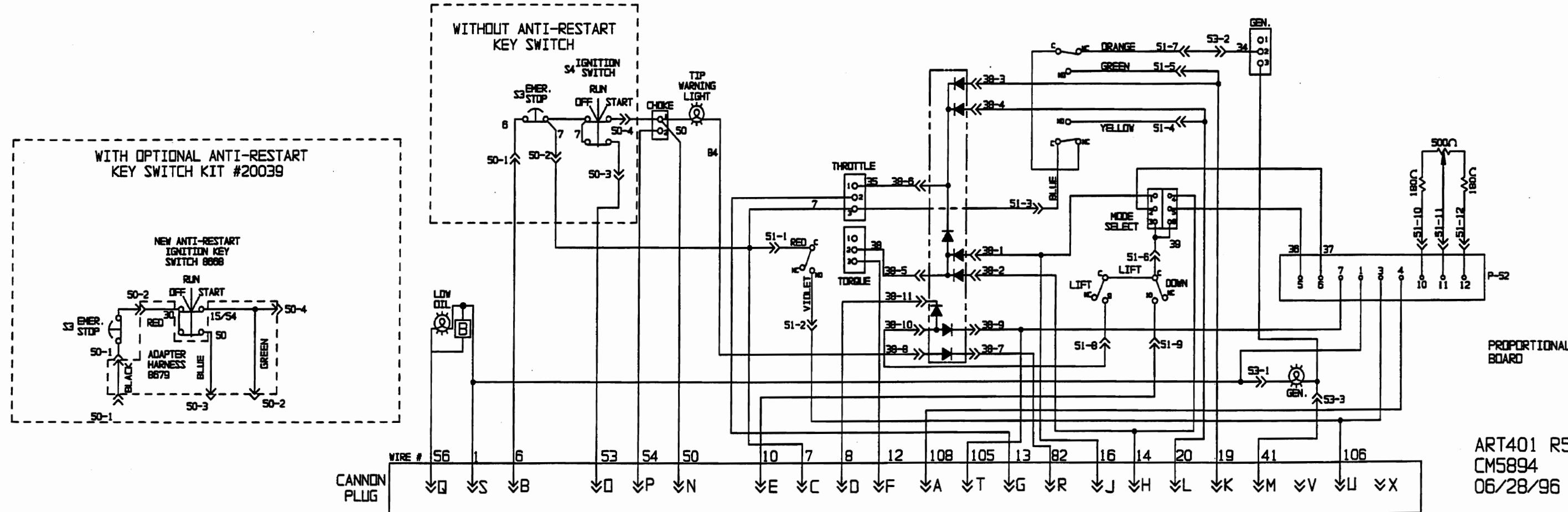
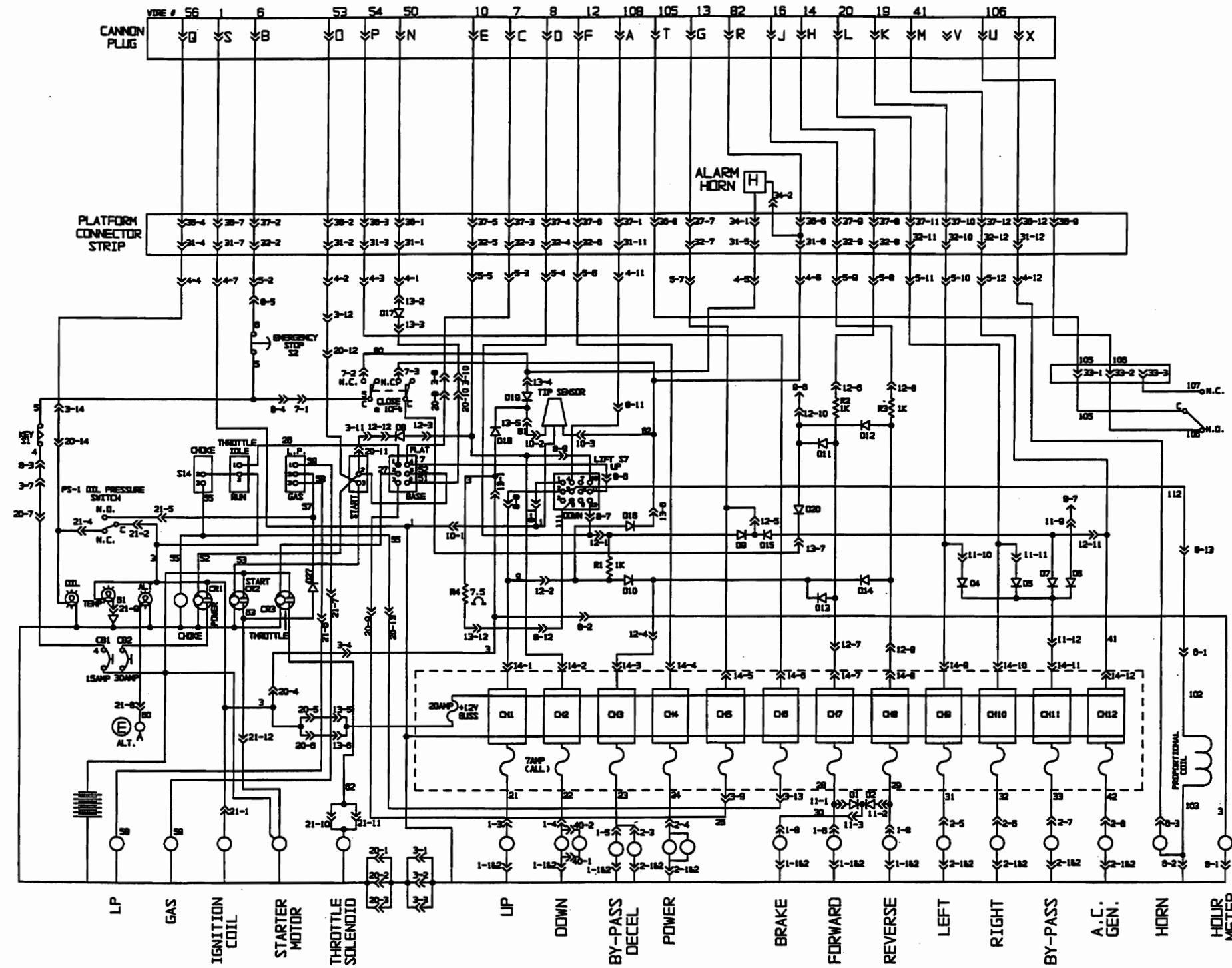


Figure 2J

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10700167 THROUGH #10700226  
 FOR PRODUCTION UNITS SERIAL #10800215 THROUGH #10800315



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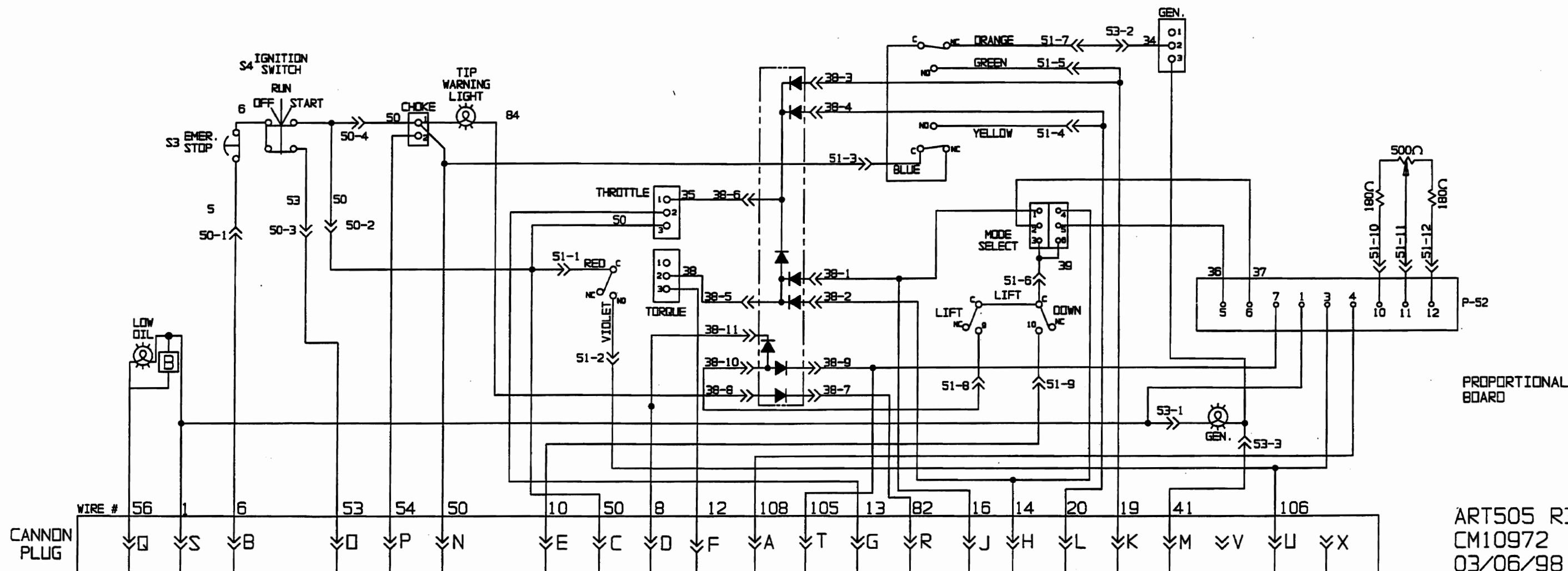
**Figure 2K**

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT &amp; 33RT

FOR PRODUCTION UNITS SERIAL #10800316 THROUGH #10800742

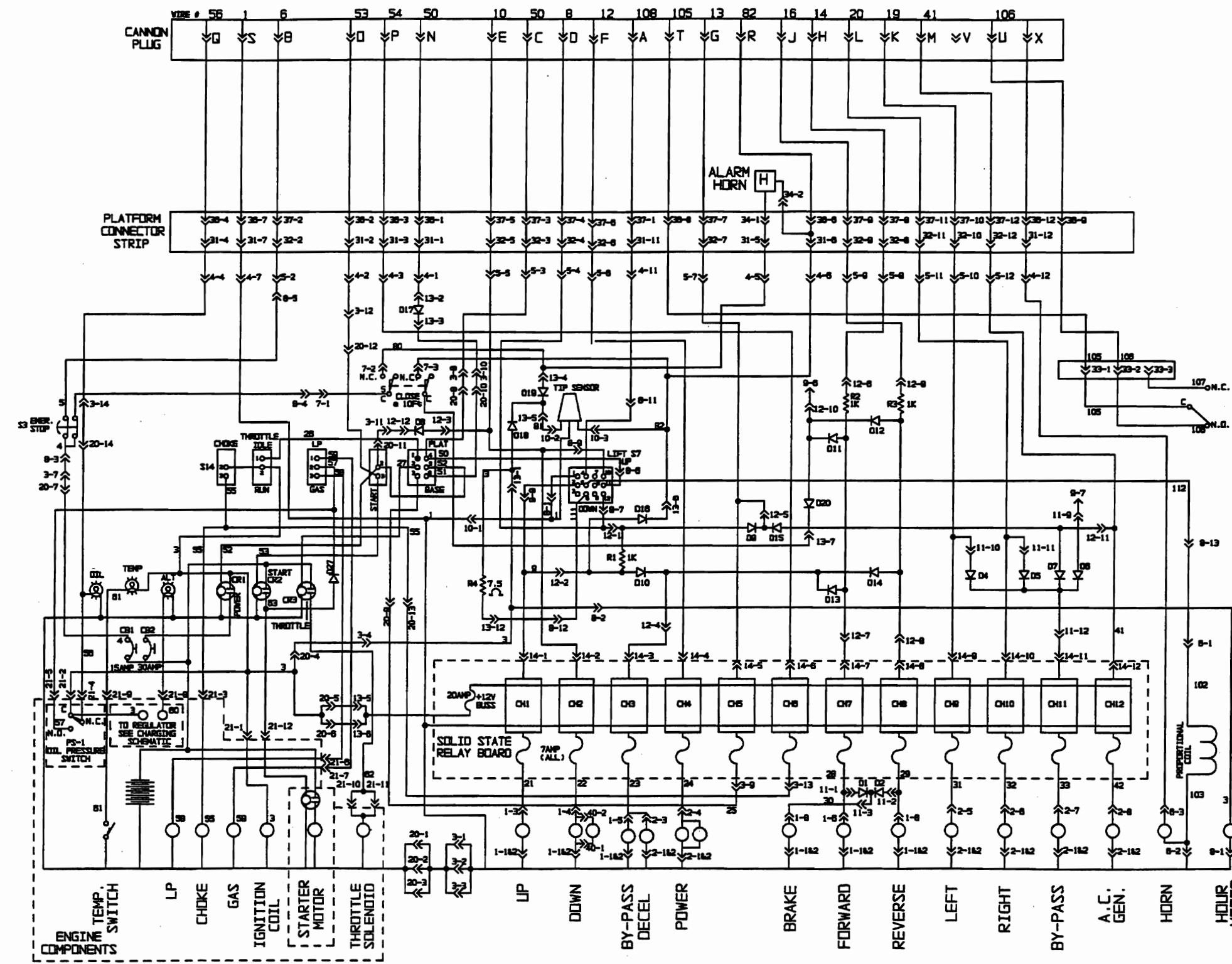
FOR PRODUCTION UNITS SERIAL #10700227 THROUGH #10700449



**Figure 2L**

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10800316 THROUGH #10800742  
 FOR PRODUCTION UNITS SERIAL #10700227 THROUGH #10700449

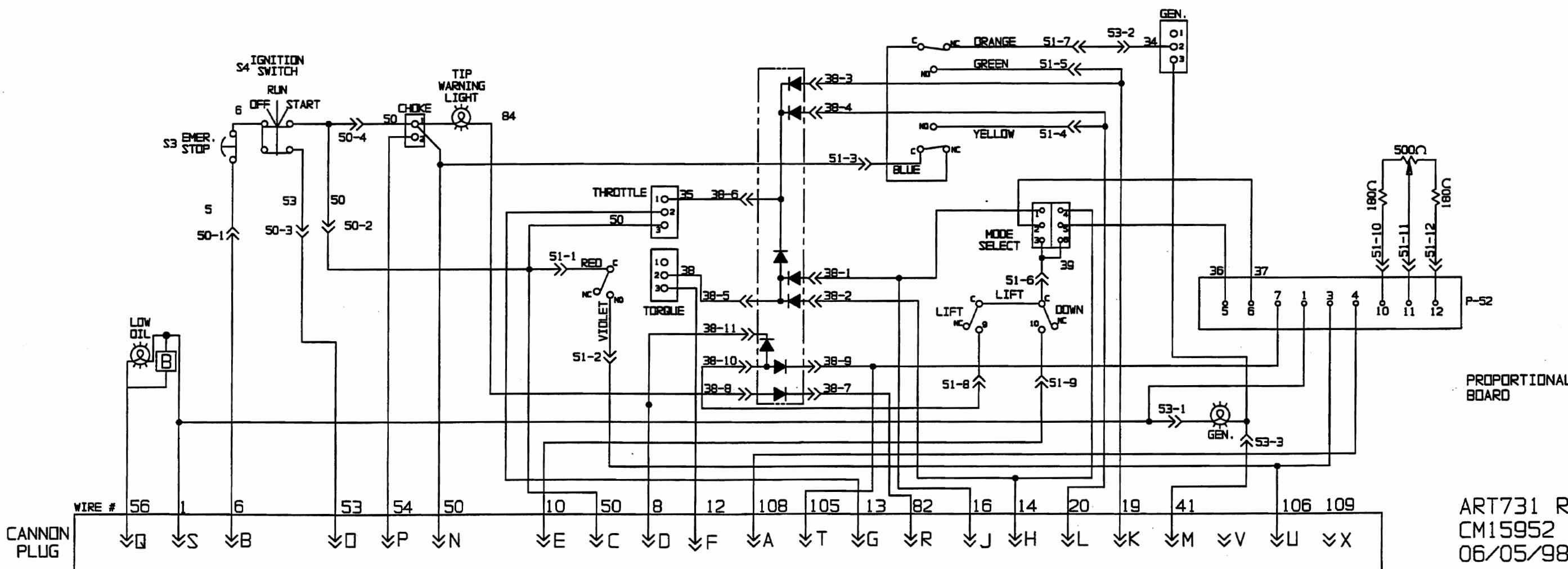


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**Figure 2M**

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

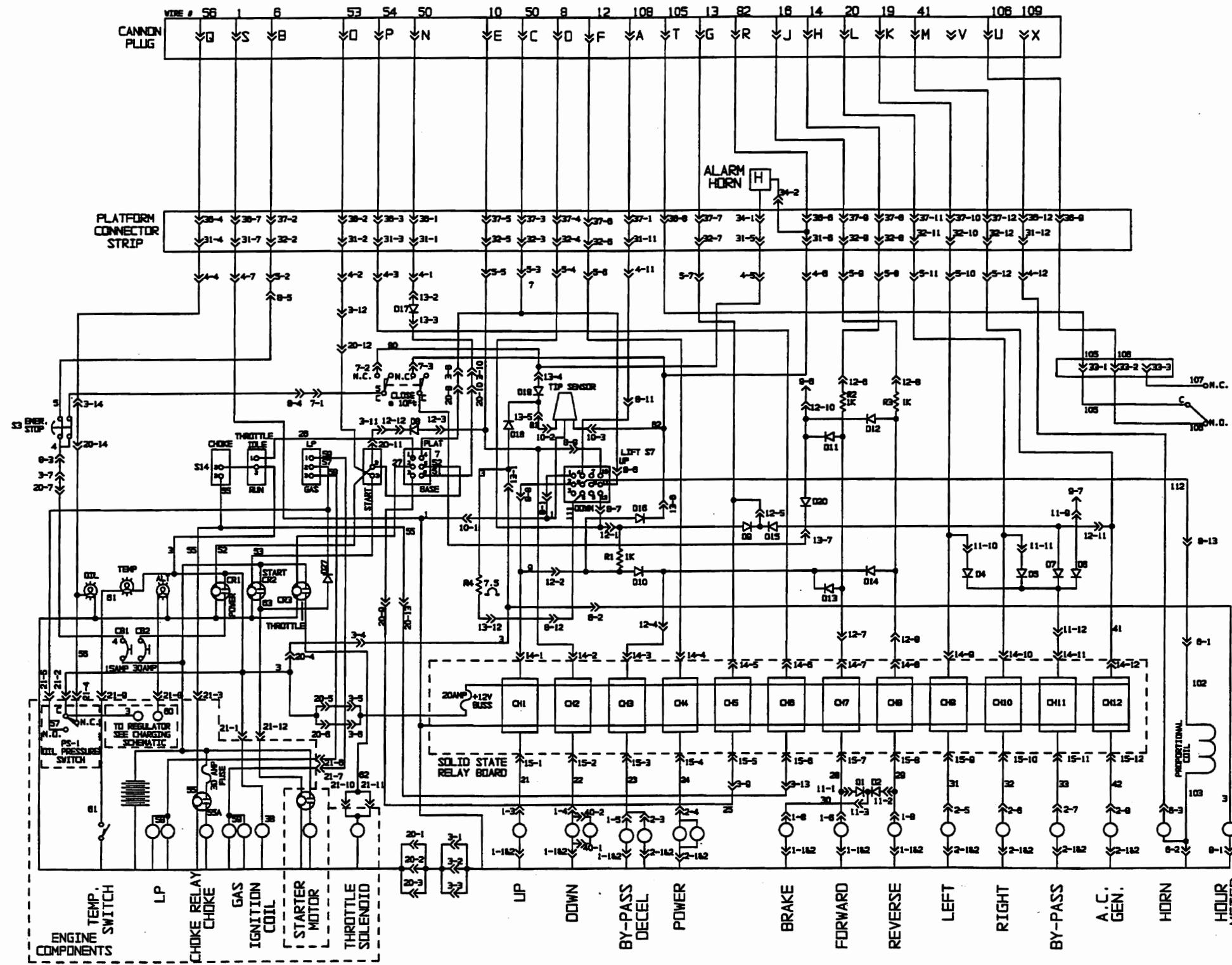
QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10800743 THROUGH PRESENT  
 FOR PRODUCTION UNITS SERIAL #10700450 THROUGH PRESENT



**Figure 2N**

## DUAL FUEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10800743 THROUGH PRESENT  
 FOR PRODUCTION UNITS SERIAL #10700450 THROUGH PRESENT

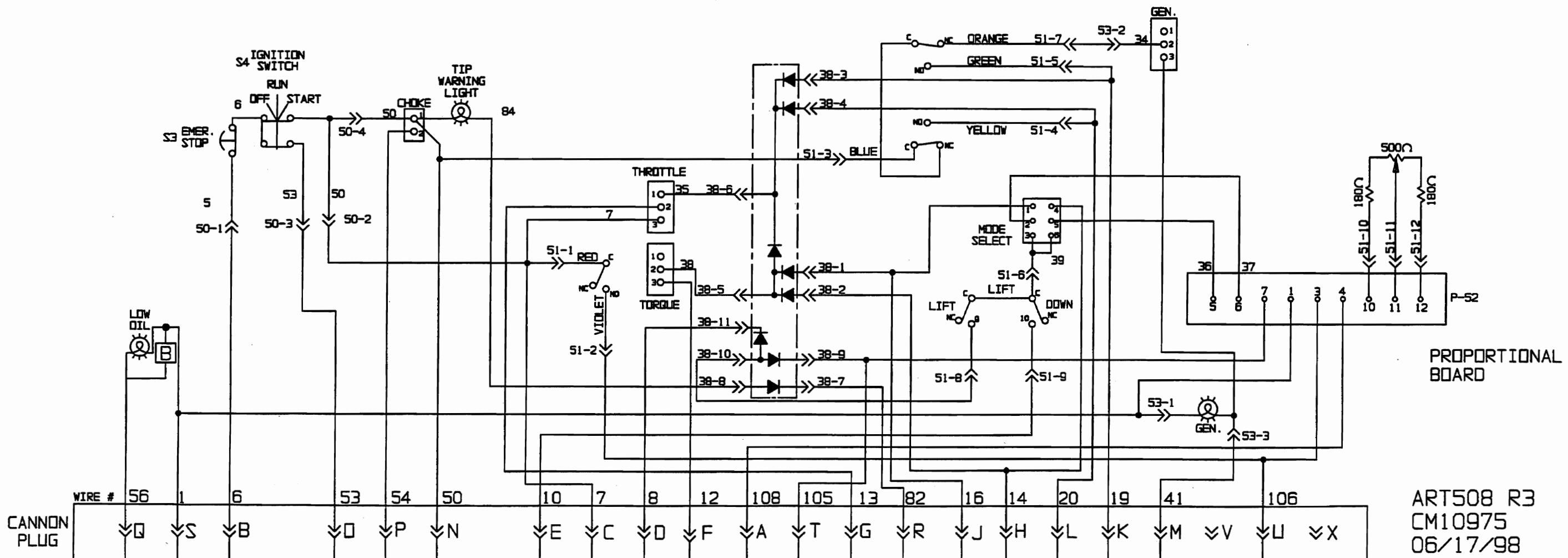


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**Figure 20**

## DIESEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT &amp; 33RT

FOR FIELD UNIT UPGRADED FROM TOGGLE BOX TO JOYSTICK  
AFTER APRIL 1, 1996 WITH STANDARD ANTI-RESTAT KEY SWITCH

**Figure 2P**

**DIESEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK**  
**QUADREX MODELS 25RT & 33RT**

FOR FIELD UNIT UPGRADED FROM TOGGLE BOX TO JOYSTICK  
 AFTER APRIL 1, 1996 WITH STANDARD ANTI-RESTAT KEY SWITCH

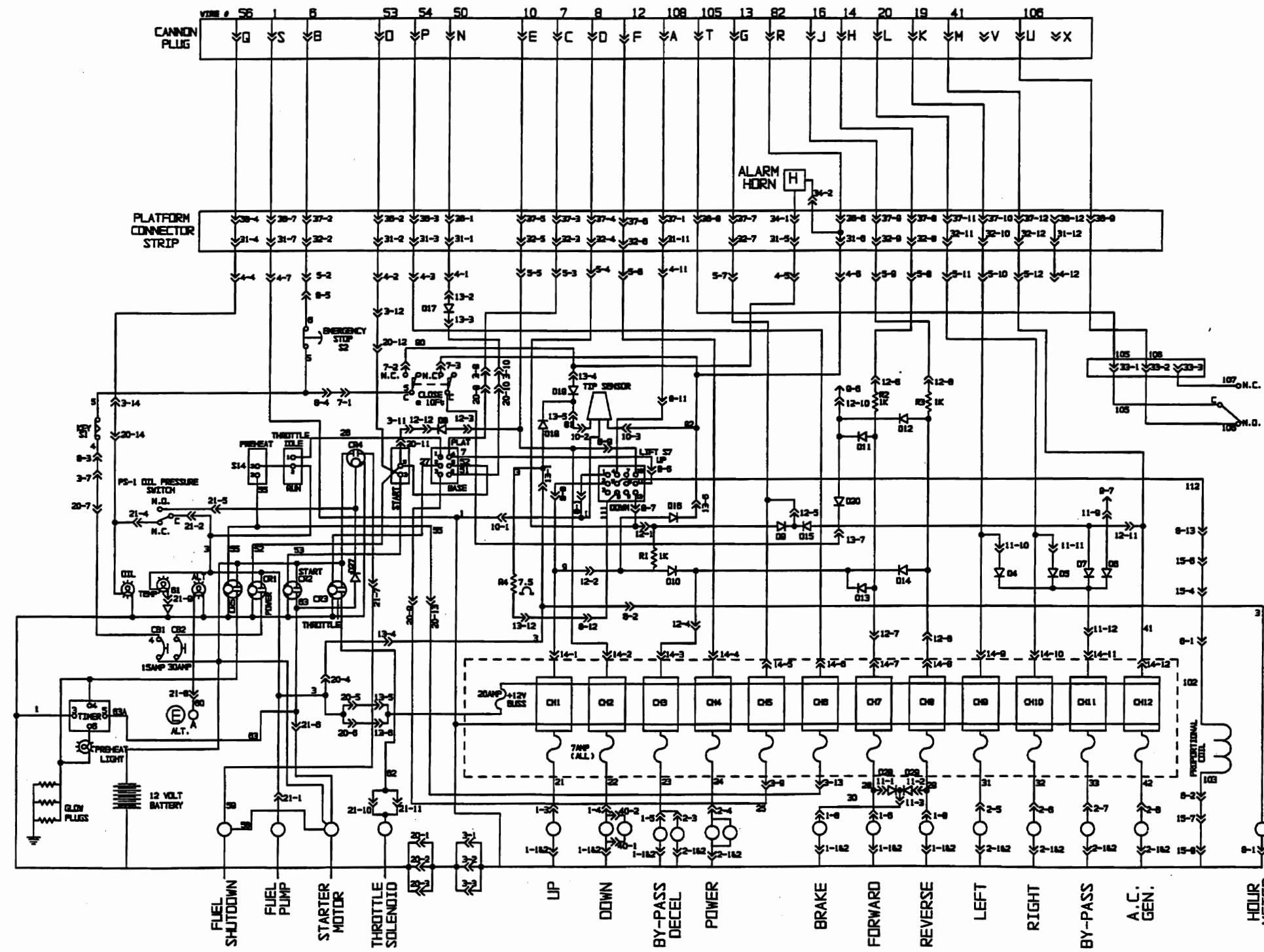
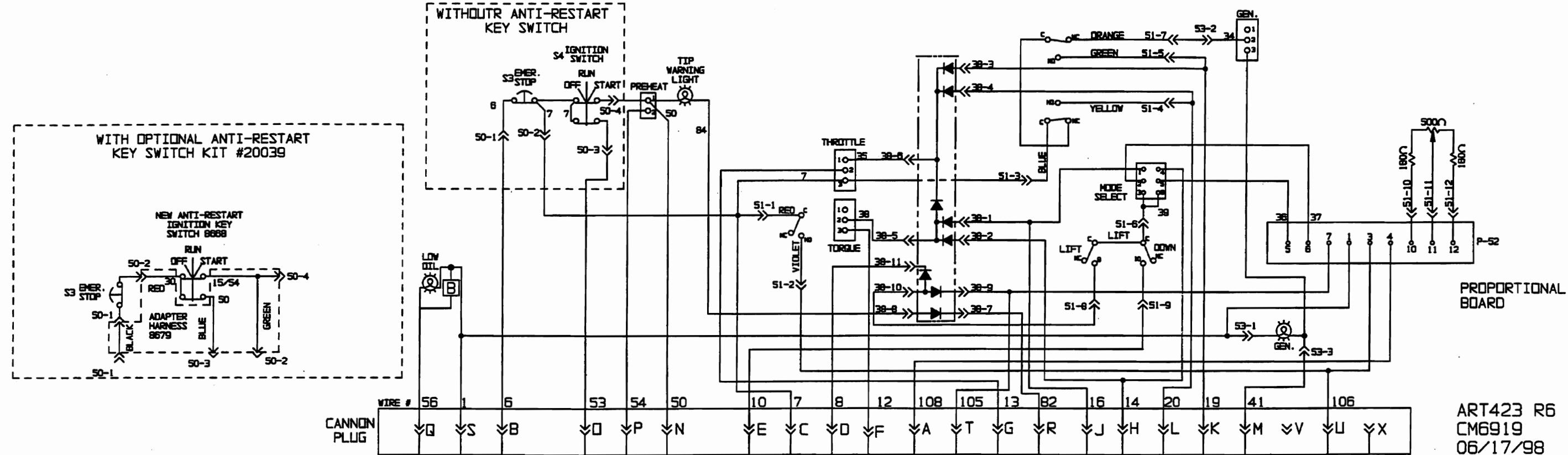


Figure 2Q

## DIESEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

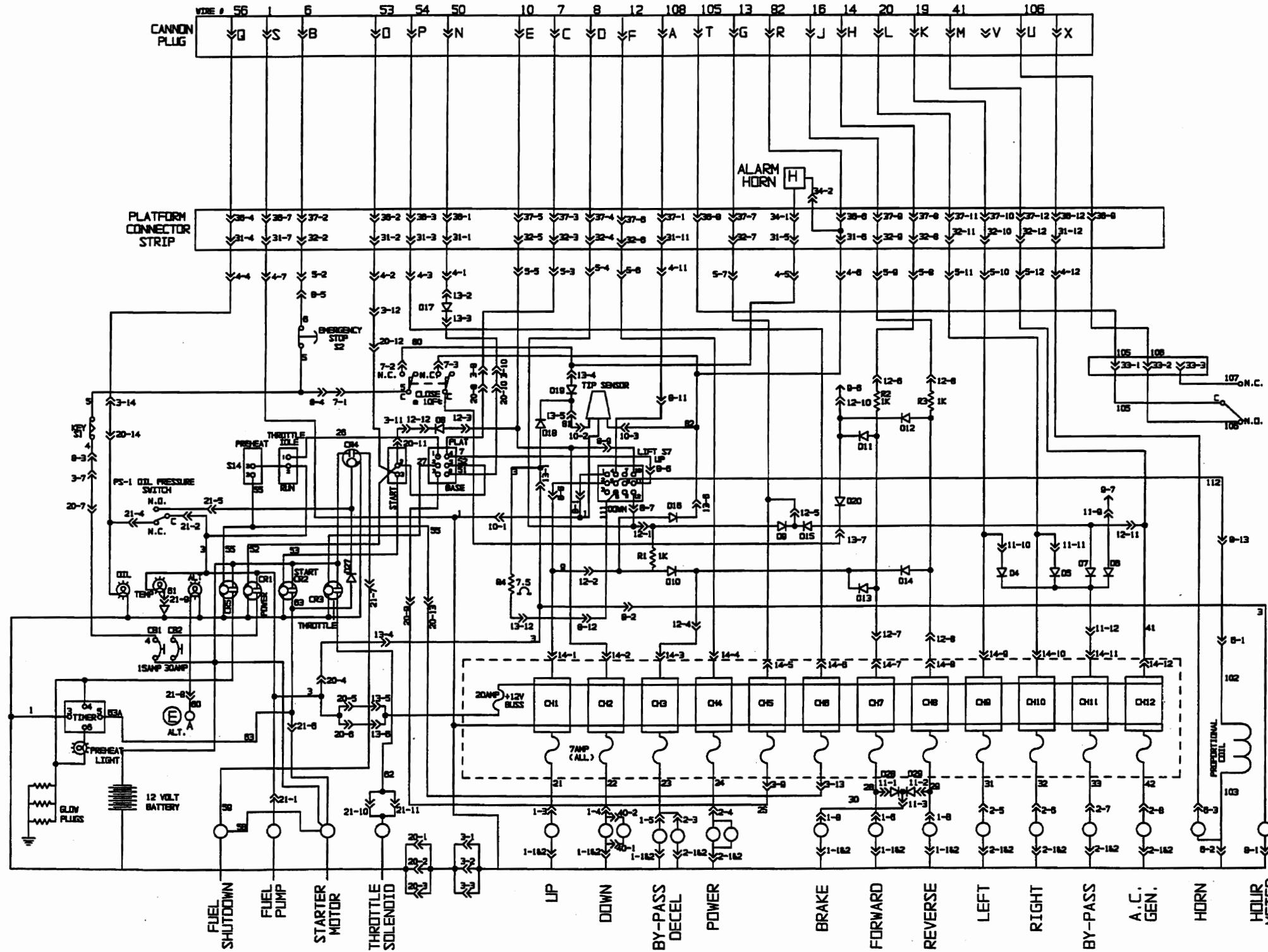
QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10800222 THROUGH #10800249  
 #10700182



**Figure 2R**

## DIESEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10800222 THROUGH #10800249  
 #10700182

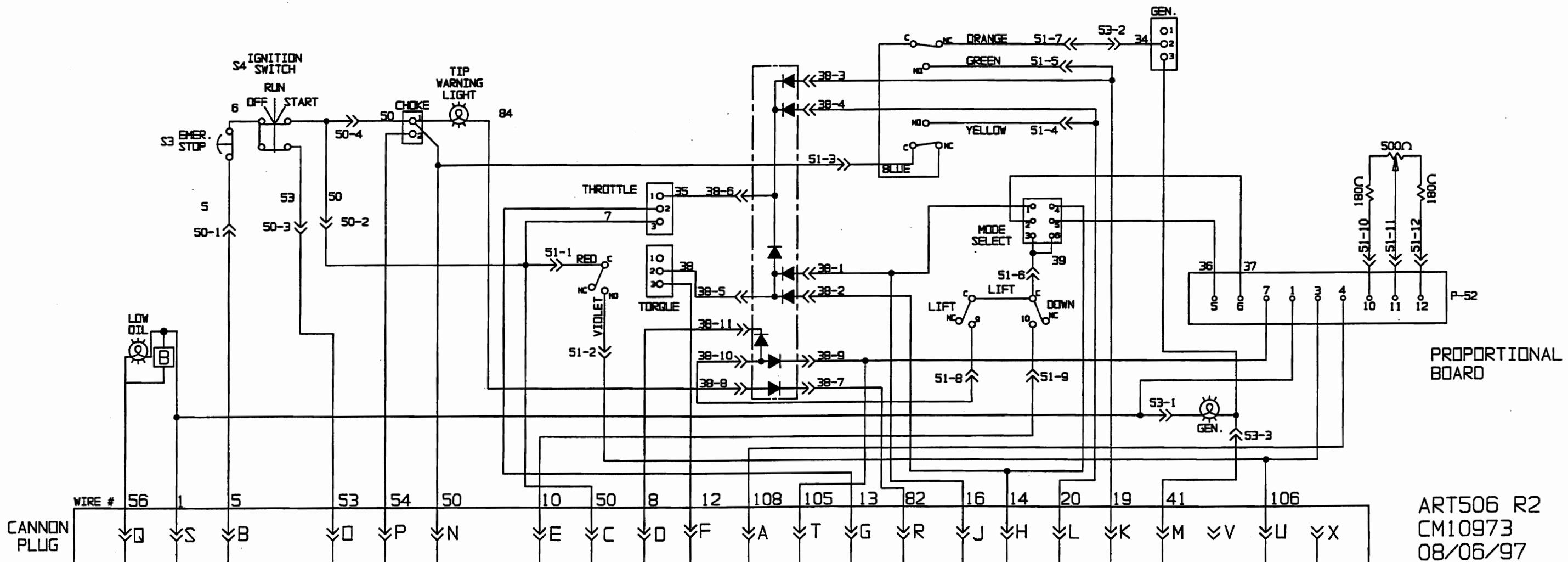


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Figure 2S

## DIESEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

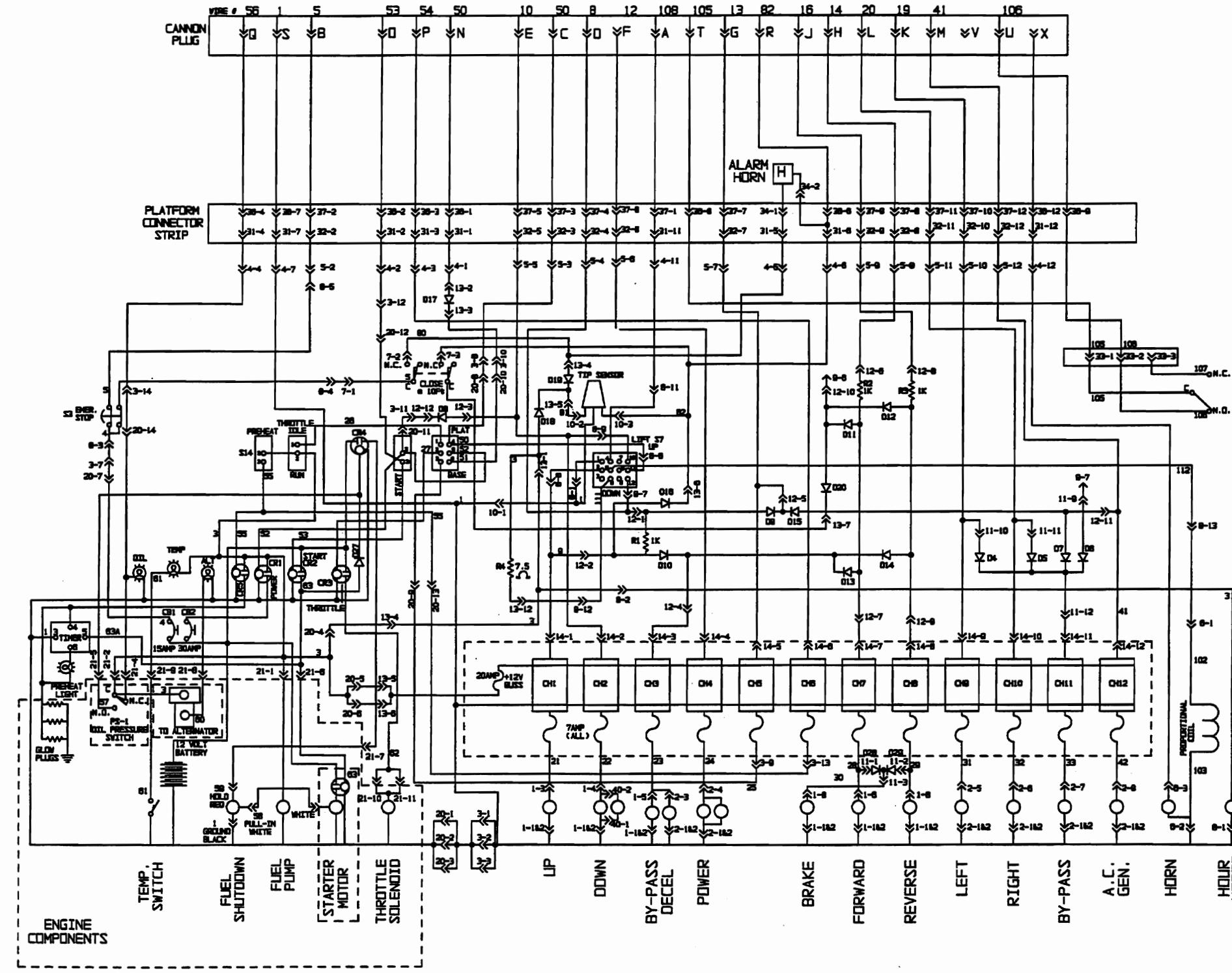
QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10800319 THROUGH PRESENT  
 FOR PRODUCTION UNITS SERIAL #10700229 THROUGH PRESENT



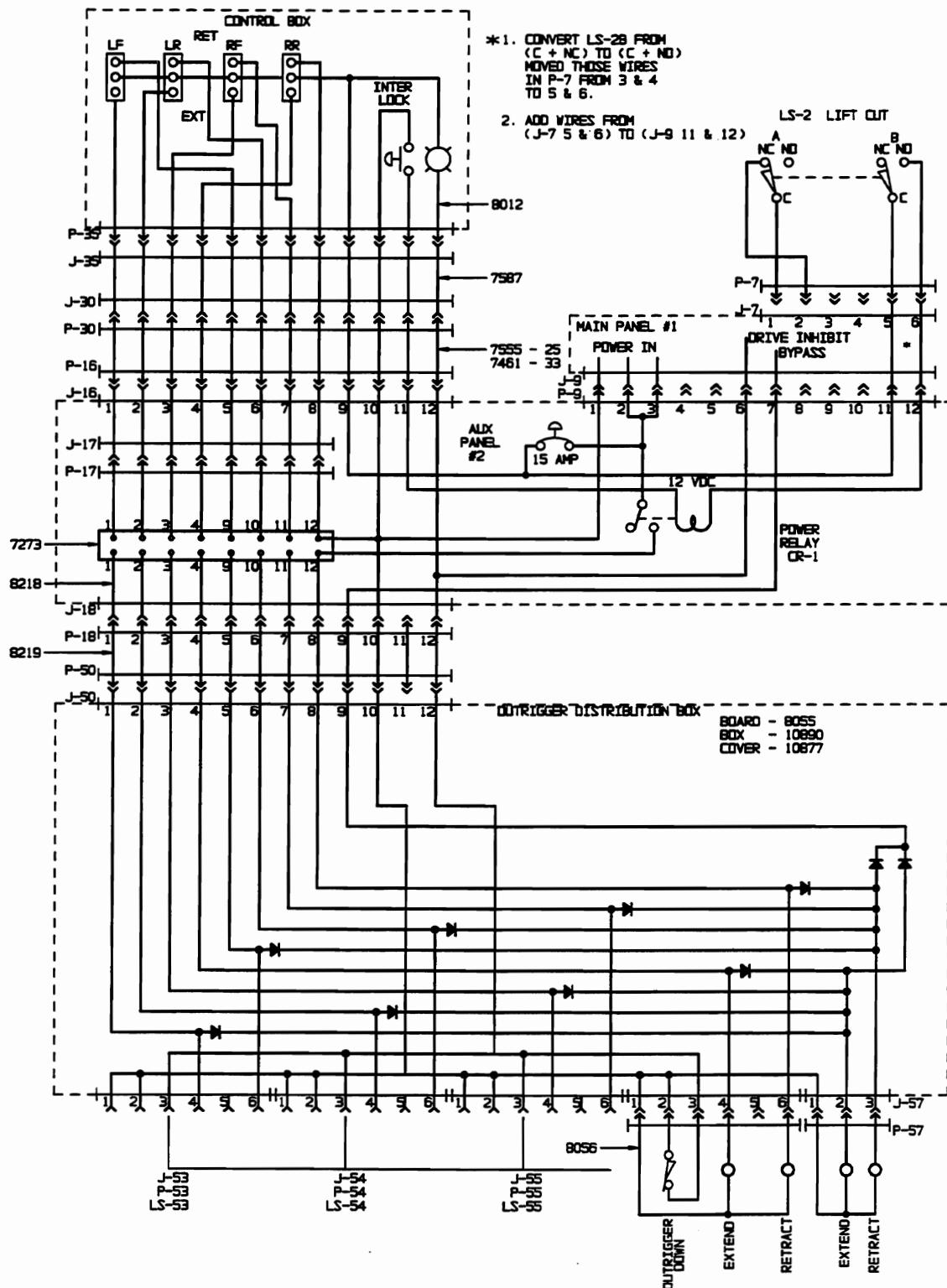
**Figure 2T**

## DIESEL ELECTRICAL WIRING DIAGRAM FOR JOYSTICK

QUADREX MODELS 25RT & 33RT  
 FOR PRODUCTION UNITS SERIAL #10800319 THROUGH PRESENT  
 FOR PRODUCTION UNITS SERIAL #10700229 THROUGH PRESENT

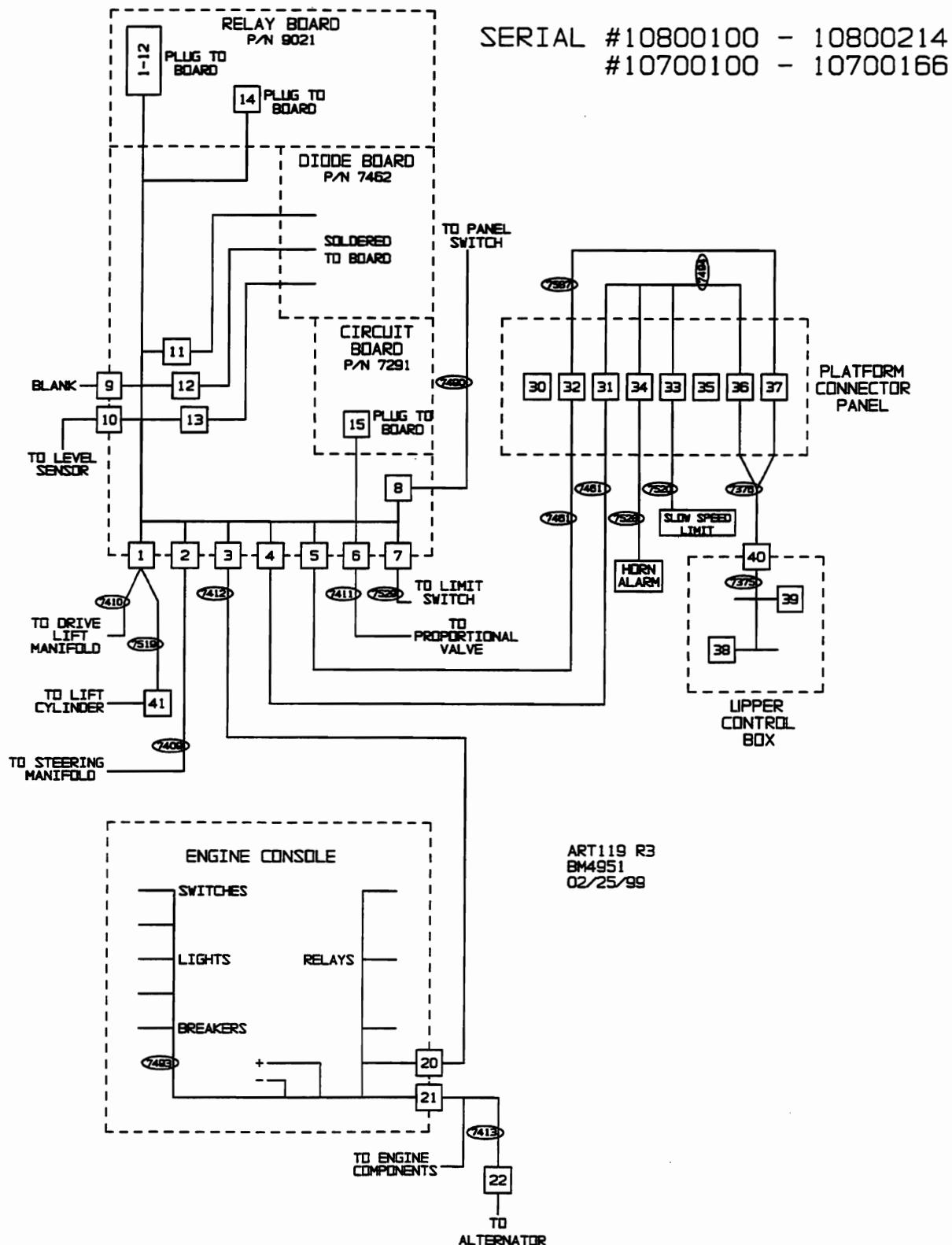


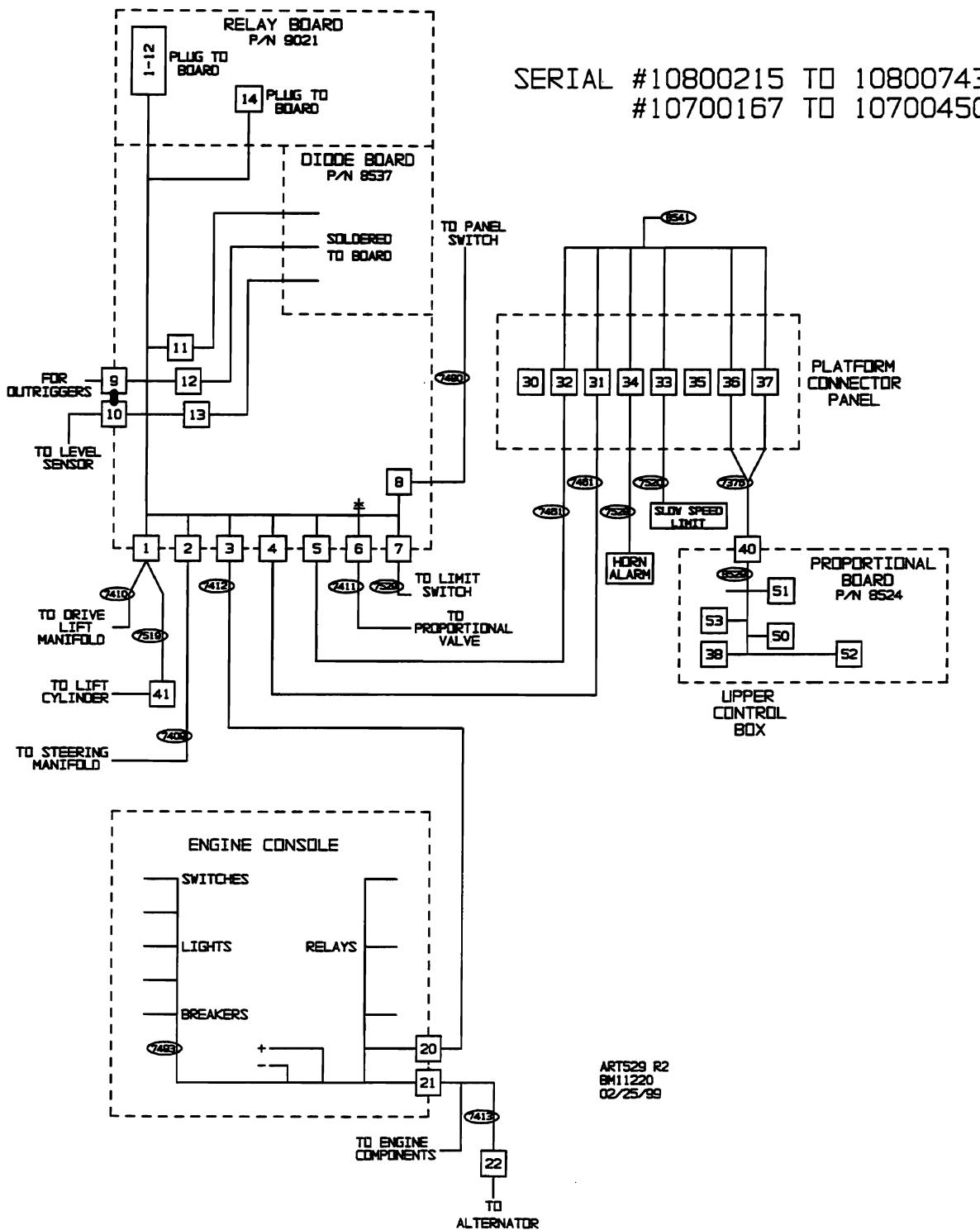
## Figure 2U - Outrigger Electrical Schematic



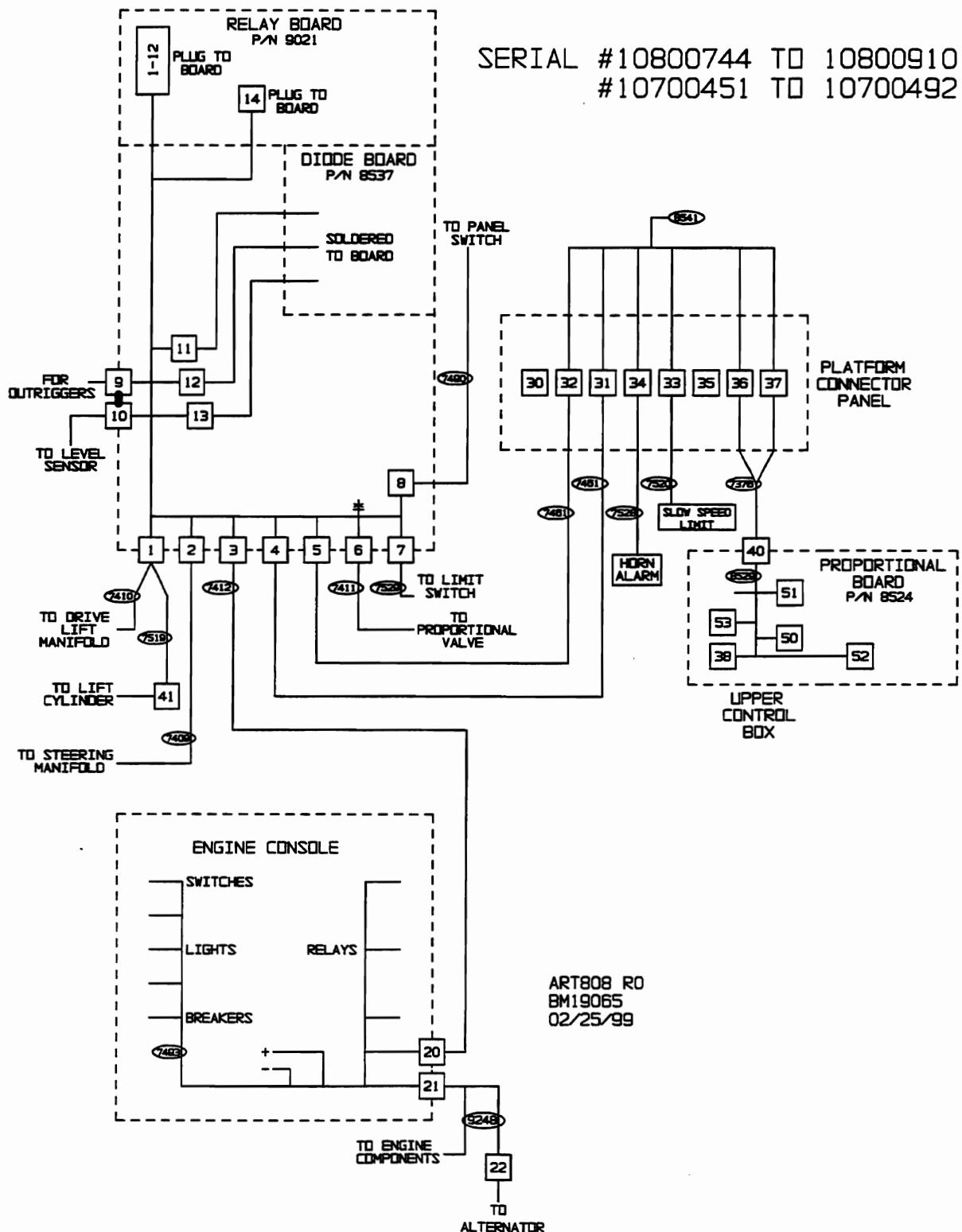
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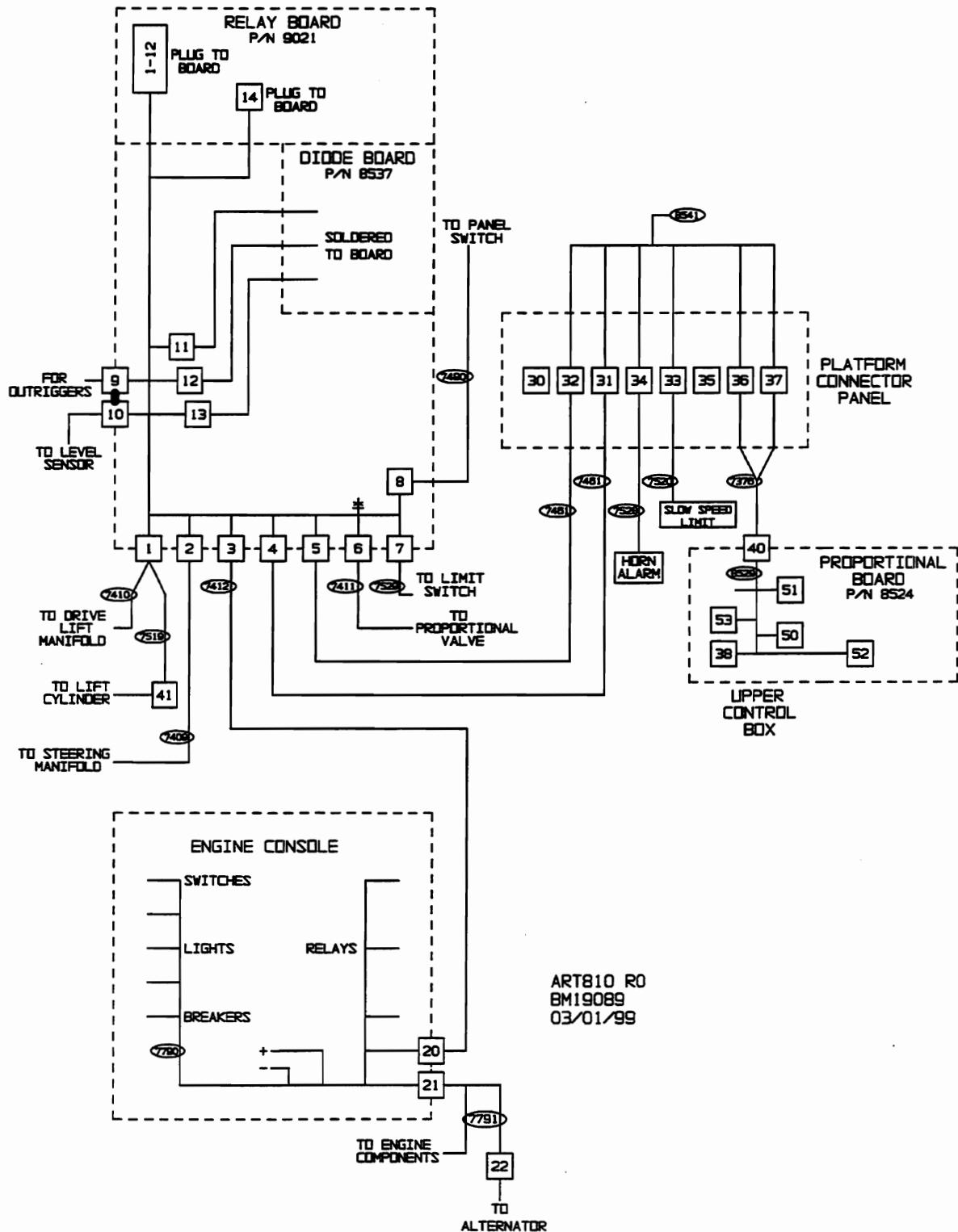
## Figure 2V - Wiring Layout Dual Fuel



**Figure 2W - Wiring Layout Dual Fuel**

## Figure 2X - Wiring Layout Dual Fuel



**Figure 2Y - Wiring Layout Diesel**

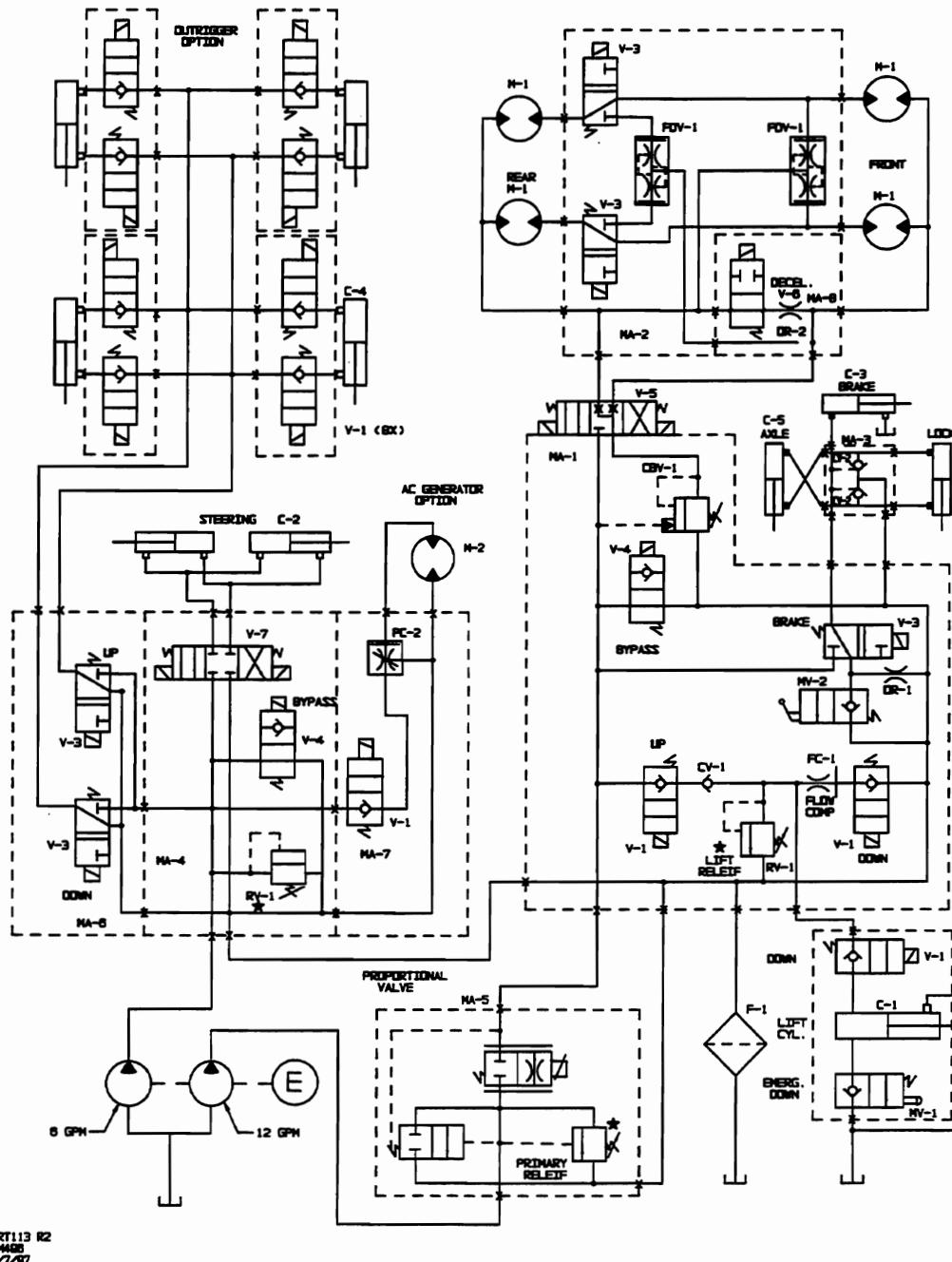


## Figure 2Z - Hydraulic Schematic

ITEM	PART NO.	QTY.	DESCRIPTION
C1	10925	1	CYLINDER - LIFT QUAD W/BEARING
	7576	SERV	REPAIR KIT, LIFT CYLINDER
C2	10329	2	ATV STEERING CYLINDER ASSY.
	5947	SERV	SEAL KIT FOR 5677 & 5678
C4	2483	1	BRAKE CYLINDER ASSY.
	5947	SERV	SEAL KIT FOR 5677 & 5678
C5	7147	1	CYLINDER - AXLE LOCKING
	7574	SERV	REPAIR KIT - AXLE CYLINDER
CBV1	7311	1	COUNTER BALANCE VALVE
CV1	5434	1	VALVE, CHECK-IN LINE
	5475	SERV	SEAL KIT - 2 WAY VALVE
CV2	7445	2	VALVE-PILOT OPER. BALL CHECK
FC1	10915	1	PLUG
FDV1	7303	2	FLOW DIVIDER 6-3
F1	7310	1	FILTER CANISTER - 10 MICRON
M1	7300P	2	HYD. WHEEL MOTOR - PAINTED
M2	8701	1	HYD. MOTOR W/CASE DRAIN
MA1	10496	1	MANIFOLD-DIRECT LIFT-LOWER
MA2	10360	1	MANIFOLD-FLOW DIVIDE COMBINE
MA3	10278	1	MANIFOLD- AXLE CONTROL
MA4	10201	1	MANIFOLD-STEERING & OPTIONS
MA5	7298	1	MAIN TUBE BASE - ATV.
MA6	10200	1	MANIFOLD-OUTRIGGER OPTION
MA7	10536	1	MANIFOLD-AC. GEN. OPTION
MA8	10361	1	MANIFOLD-DECCEL
MV1	5435	1	VALVE-MANUAL PULL
	5475	SERV	SEAL KIT - 2 WAY VALVE
MV2	7491	1	VALVE-MANUAL RELEASE
DR1			
DR2	10521	1	METERING PLUG
PC2	7560	1	PRIORITY FLOW CONTROL VALVE
RV1	6316	2	ADJ RELIEF VALVE
V1	6973	12	VALVE N.C. POPPET 2 WAY
V1	5475	SERV	SEAL KIT - 2 WAY VALVE
V3	6976	5	VALVE 3 WAY 2 POSITION
V3	5476	SERV	SEAL KIT
V4	6974	2	VALVE N.O. POPPET 2/WAY
V4	5475	SERV	SEAL KIT - 2 WAY VALVE
V5	7288	1	4 WAY VALVE, DIRECTIONAL
V6	5475	SERV	SEAL KIT - 2 WAY VALVE
V6	6975	1	VALVE N.O. SPOOL 2 WAY
V7	7977	1	VALVE - 4 WAY 3 POS. CLSD CNTR
	6161	SERV	SPRING & O-RING KIT

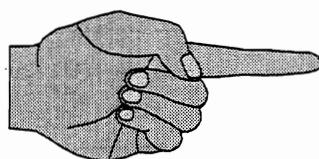
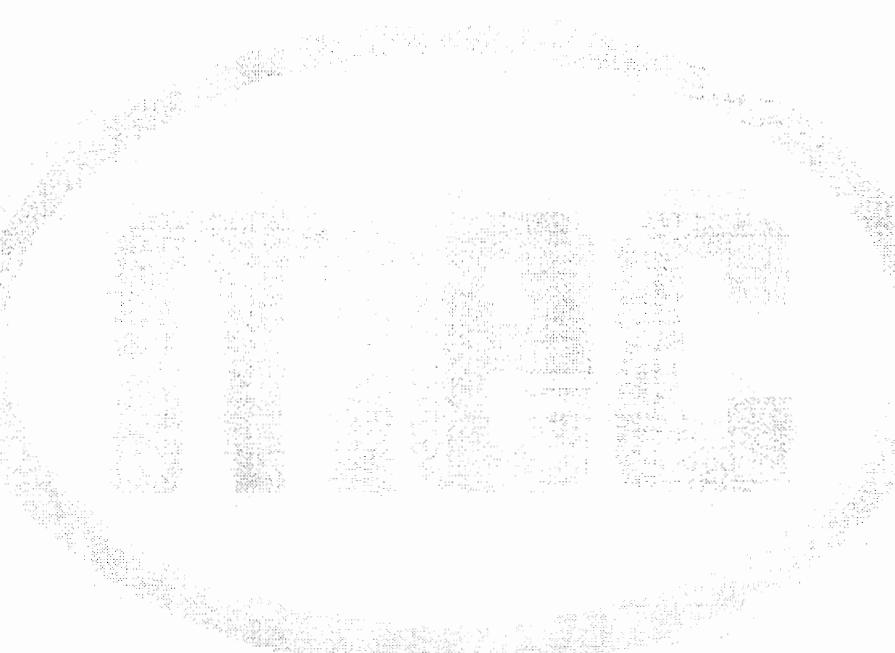
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## Figure 2Z - Hydraulic Schematic



PRESSURE SETTINGS	33'	25'
* PRIMARY LIFT STEERING	3000 2250 1500*	3000 2000 1500* 1900 W/ GEN OPTION

# Notes:

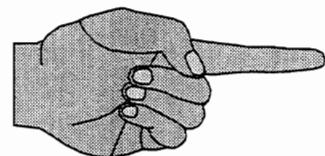


**Next Page**

## **Control Boxes**



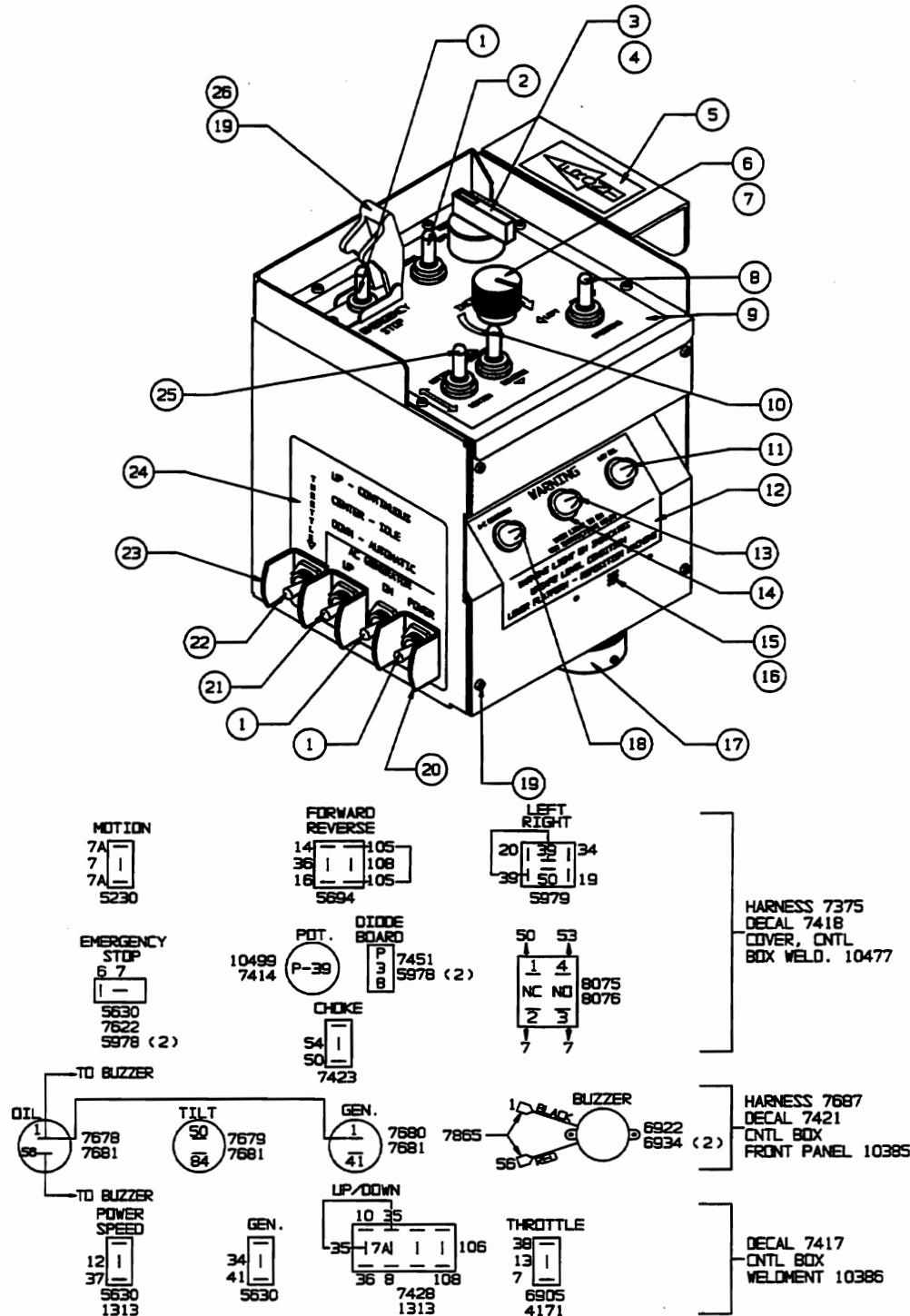
# Notes:



[Next Page](#)

## Figure 3A - Toggle Switch Control Box Assembly

10551 - UPPER CONTROL BOX ASSY. - QUADREX RT



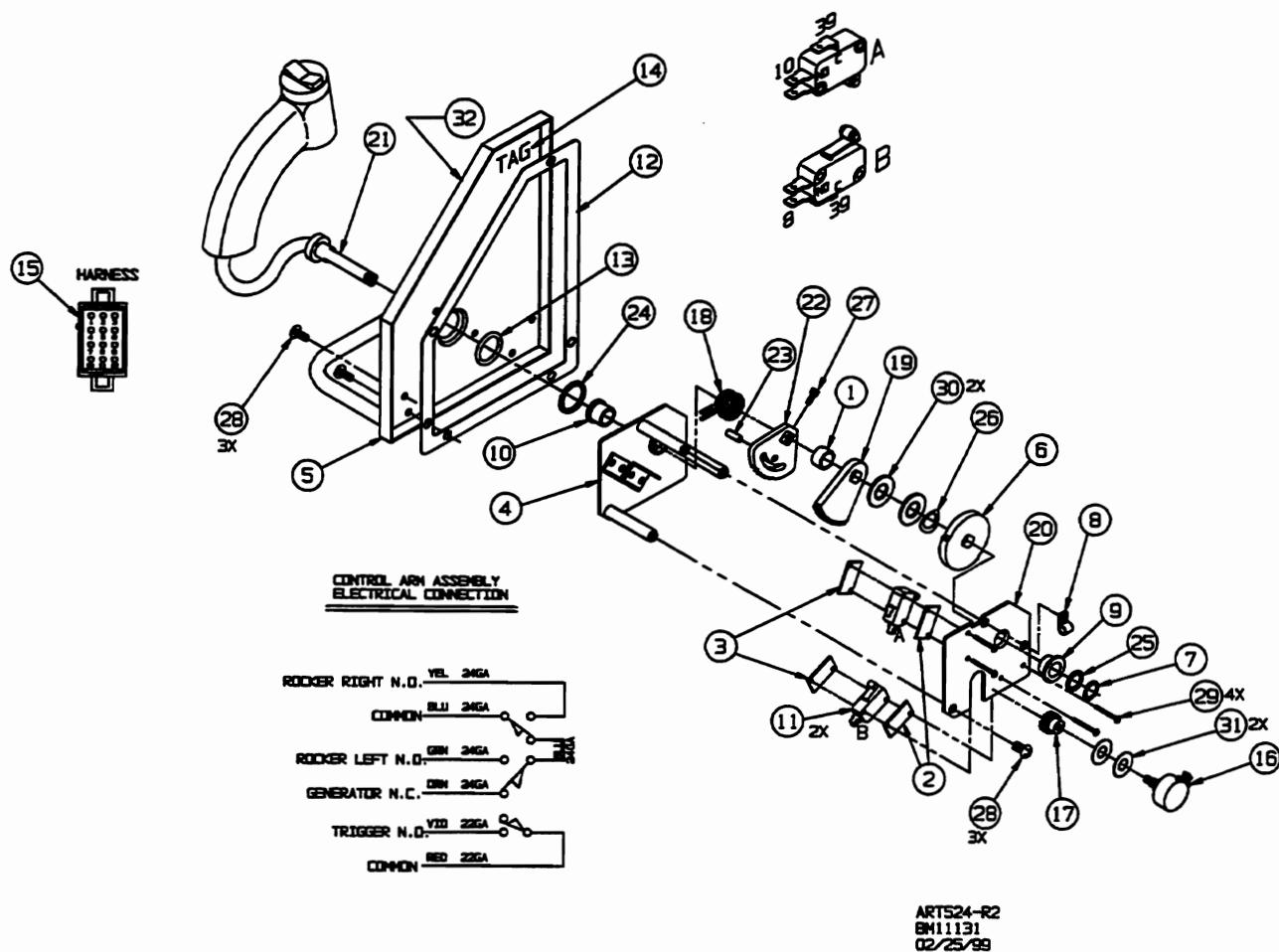
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## Figure 3A - Toggle Switch Control Box Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	5630	3	SWITCH TOGGLE
2	7423	1	SWITCH , TOGGLE 1 POLE 2 POSITION
3	8075	1	SWITCH, SELECTOR 3 POSITION
4	8076	1	BASE MOUNTING WITH 2 CONTACT BLOCKS
5	7156	1	DECAL - FRONT
6	10499	1	POT WITH CONNECTOR
7	7414	1	KNOB POTENTIOMETER
8	5979	1	SWITCH
9	7418	1	DECAL-UPPER CONTROL BOX
10	5694	1	SWITCH TOGGLE
11	8533	1	LAMP ASSEMBLY RED JS RT
12	7421	1	DECAL-CONTROL BOX FRONT
13	7679	1	LIGHT INDICATOR YELLOW
14	7681	3	LAMP DIALIGHT
15	6922	1	ALARM BUZZER 12 VOLT
16	HDW6934	2	BTMCHROUNDSL #6 320.62ZSTLN
17	7375	1	WIRE HARNESS-UPPER CONTROL BOX
18	8534	1	LAMP ASSY, GREEN JS - RT
19	HDW5978	22	BTSTFPAN CRR #6 320.62Z 5Y
20	1313	2	SWITCH BOARD
21	7428	1	SWITCH TOGGLE, 3 POSITION
22	6905	1	TOGGLE, SWITCH
23	4171	1	SWITCH GUARD - END
24	7417	1	DECAL-CONTROL BOX SIDE
25	5230	1	SWITCH TOGGLE
26	7622	1	SWITCH GUARD-EMERGENCY STOP

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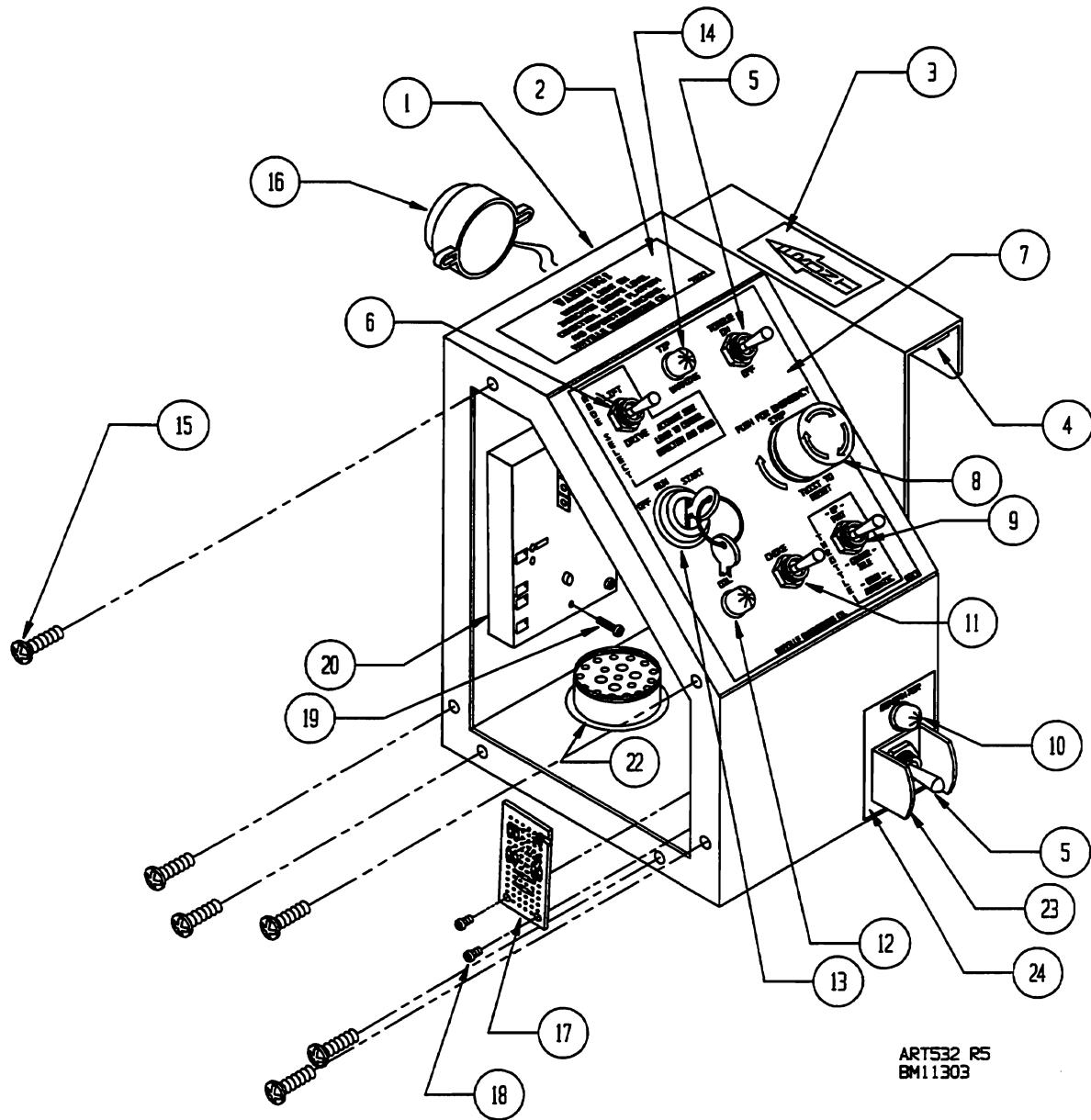
## Figure 3B - Joystick Control Box Cam Assembly



## Figure 3B - Joystick Control Box Cam Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	3763	1	SPACER STEP - JOYSTICK
2	3764	2	SPACER PLATE - JOYSTICK
3	3765	2	STRAP PLATE - JOYSTICK
4	3766	1	TOP PLATE WELDMENT - JOYSTICK
5	3772	1	COVER WELDMENT - JOYSTICK
6	3782	1	DIRECTIONAL CAM - JOYSTICK
7	5736	1	RETAINING RING, EXT. .50"
8	6917	1	CABLE CLAMP .25"
9	7818	1	BEARING, BRONZE FLANGED
10	7819	1	BEARING, BRONZE FLANGED
11	8696	2	SWITCH, LIMIT MICRO - V7
12	7875	1	GASKET - JOYSTICK
13	7882	1	O-RING 7/8 ID X 1.125 OD
14	8066	1	TAG, INSPECTION LINE
15	8529	1	WIRE HARNESS - JOYSTICK, 4WD
16	10977	1	POTENTIOMETER
17	8389	1	GEAR - SPUR
18	8435	1	SPRING TORSION JOYSTICK 2033
19	13402	1	LARGE GEAR - PROP JOYSTICK
20	13403	1	BOTTOM PLATE CONTROL BOX - JS
21	20080	1	ASSEMBLY, CONTROL ARM-JS QUAD RT
	7476	6	TERMINAL PIN - AMP CONNECTOR
	13638	1	ARM ASSEMBLY - JOYSTICK
	8522	1	HANDLE - GRIP ASSEMBLY
22	13502	1	CENTERING BRACKET - JOYSTICK
23	100/8348	1	PIN, HOLD DOWN
24	HDW3768	1	WASHER, .895 ID X 1.077 OD X .055 THK
25	HDW3771	1	WASHER, .50 ID X .688 OD X .033 THK
26	HDW7881	1	WASHER, SPECIAL, .531 ID X .795 OD X .011 THK
27	HDW7887	1	MACHINE SCREW #6-32 .50"
28	HDW7888	6	MACHINE SCREW #10-32 .50" TRUSS HEAD, CROSS RECESSED DRIVE
29	HDW8399	4	MACH SCREW #4-40 .62" ROUND HEAD SLOTTED DRIVE
30	HDW8531	2	WASHER, .531 ID X 1.00 OD X .063 THK
31	HDW8567	2	WASHER, .380 ID X .844 OD X .048 THK
32	8388	1	DECAL, DIRECTIONAL

ART524-R2  
BM11131  
02/25/99

**Figure 3C - Joystick Control Box Assembly (old style)**

## Figure 3C - Joystick Control Box Assembly (old style)

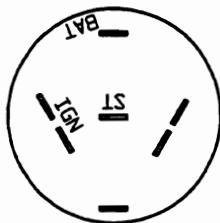
ITEM	PART NO.	QTY.	DESCRIPTION
	20082	1	CONTROL BOX ASSEMBLY, JOYSTICK, RT
1	10960	1	CONTROL BOX WELDMENT
2	7827	1	DECAL - WARNING LIGHT-QUADREX
3	7156	1	DECAL - FRONT
4	6350	.5 FT	FOAM TAPE
5	5630	2	SWITCH, TOGGLE, 2 POSITION
6	5275	1	SWITCH, TOGGLE, 2 POSITION
7	8517	1	DECAL - JOYSTICK CONTROL BOX, 4WD
8	7800	1	SWITCH, STOP, ASSEMBLY
	9345	1	BLOCK-CONTACT N.C. (ABB) OR
	8083	1	BLOCK-CONTACT N.C. (TELEMECANIQUE)
9	6905	1	SWITCH, TOGGLE, 3 POSITION
10	8534	1	LAMP ASSEMBLY, GREEN-JOYSTICK RT
11	7423	1	SWITCH, TOGGLE, 2 POSITION MOMENTARY
12	8533	1	LAMP ASSEMBLY, RED
13	8869	1	ANTI RESTART KEY SWITCH
	8902	SERV.	REPLACEMENT KEY
14	8532	1	LAMP ASSEMBLY, YELLOW
15	HDW7888	6	MACHINE SCREW, #10-32 X .500, GRADE 2
16	7553	1	ALARM, TIP OVER
17	7451	1	CIRCUIT BOARD - CONTROL BOX
18	HDW5978	2	MACHINE SCREW, #6-32 X .25
19	HDW7561	4	MACHINE SCREW, #6-32 X .75
20	8524	1	VALVE DRIVE BOARD
21	7376	1	WIRE HARNESS, CONTROL BOX CORD
22	8529	1	WIRE HARNESS-JOYSTICK 4WD
23	1313	1	SWITCH GUARD
24	8518	1	DECAL-GENERATOR OPTION
25	8536	1	GENERATOR WIRE HARNESS-JOYSTICK RT (NOT SHOWN)
26	7865	2	TERMINAL, COUPLER 1/4 " SPADE (NOT SHOWN)
27	8066	1	TAG, INSPECTION LINE (NOT SHOWN)
28	7681	2	LAMP, DIALIGHT (NOT SHOWN)

ART532 RS  
BM11303

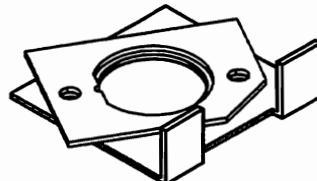
## Figure 3D - Anti-Restart Keyswitch Upgrade

INSTRUCTIONS FOR REMOVING BOSCH ANTI-RESTART SWITCH AND INSTALLING A POLLAK ANTI-RESTART SWITCH IN THE QUADREX RT JOYSTICK CONTROL BOX

1. DISCONNECT JOYSTICK FROM CONTROL CORD
2. OPEN BOX AND UNPLUG J-51
3. REMOVE BOSCH ANTI-RESTART KEY SWITCH
4. USING A ONE INCH KNOCK-DOWN, PUNCH A HOLE OVER THE OLD KEY SWITCH HOLE, ALSO DRILL FOUR 3/16 HOLES IN THE BOTTOM OF THE CONTROL BOX IN THE CORNERS
5. INSTALL NEW SWITCH WITH ANTI-ROTATION PLATE #20092 TO THE INSIDE OF THE CONTROL BOX. (SLIDE THE KEY INTO THE SWITCH AND SEE IF THE SWITCH LINES UP WITH THE WORD ON THE DECAL. IF IT DOESN'T, REPOSITION THE SWITCH WITH THE PLATE. IF THE SWITCH TWIST WITH THE PLATE, BEND THE TABS ON THE PLATE IN OR OUT SO THEY KEEP THE SWITCH FROM TURNING)
6. IF THERE ARE THREE COLORED WIRES:
  - A. CONNECT THE GREEN TO THE IGN TERMINAL
  - B. CONNECT THE BLUE TO THE ST TERMINAL
  - C. CONNECT THE RED TO THE BAT TERMINALIF THERE ARE THREE BLACK WIRES WITH NUMBER DESIGNATIONS:
  - A. CONNECT THE #50 TO THE IGN TERMINAL
  - B. CONNECT THE #53 TO THE ST TERMINAL
  - C. CONNECT THE #6 TO THE BAT TERMINAL
7. RECONNECT J-51 AND TUCK WIRES AND HARNESS DOWN NEXT TO THE E-STOP
8. CLOSE AND SECURE CONTROL BOX



NEW  
ANTI-RESTART  
KEY SWITCH  
#8869



ANTI-ROTATION  
PLATE  
#20092

BOSCH TO POLLAK UPGRADE KEYSWITCH KIT - #20083  
POLLACK ANTI-RESTART KIT - #20039

ART590-R2  
BM13173  
12/18/97

## Figure 3E - Anti-Restart Keyswitch Upgrade

INSTRUCTIONS FOR INSTALLING ANTI-RESTART SWITCH  
IN QUADREX RT JOYSTICK CONTROL BOX

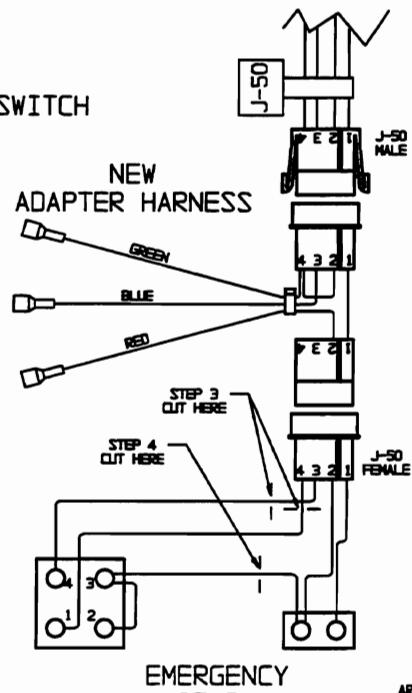


ANTI-ROTATION  
PLATE  
#20092

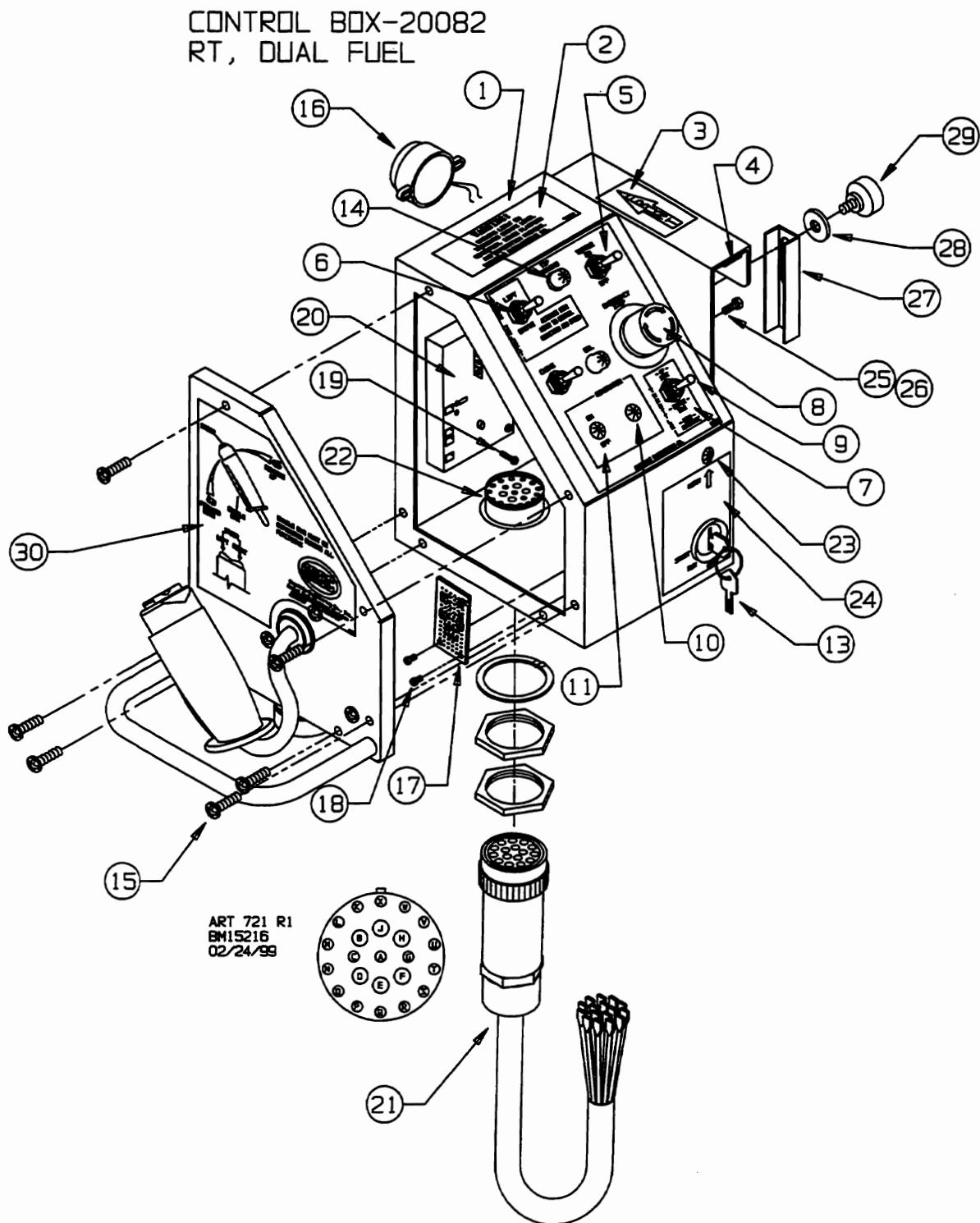


NEW  
ANTI-RESTART  
KEY SWITCH  
#8869

OLD  
START/STOP  
SWITCH



ART499-R1  
BN10986

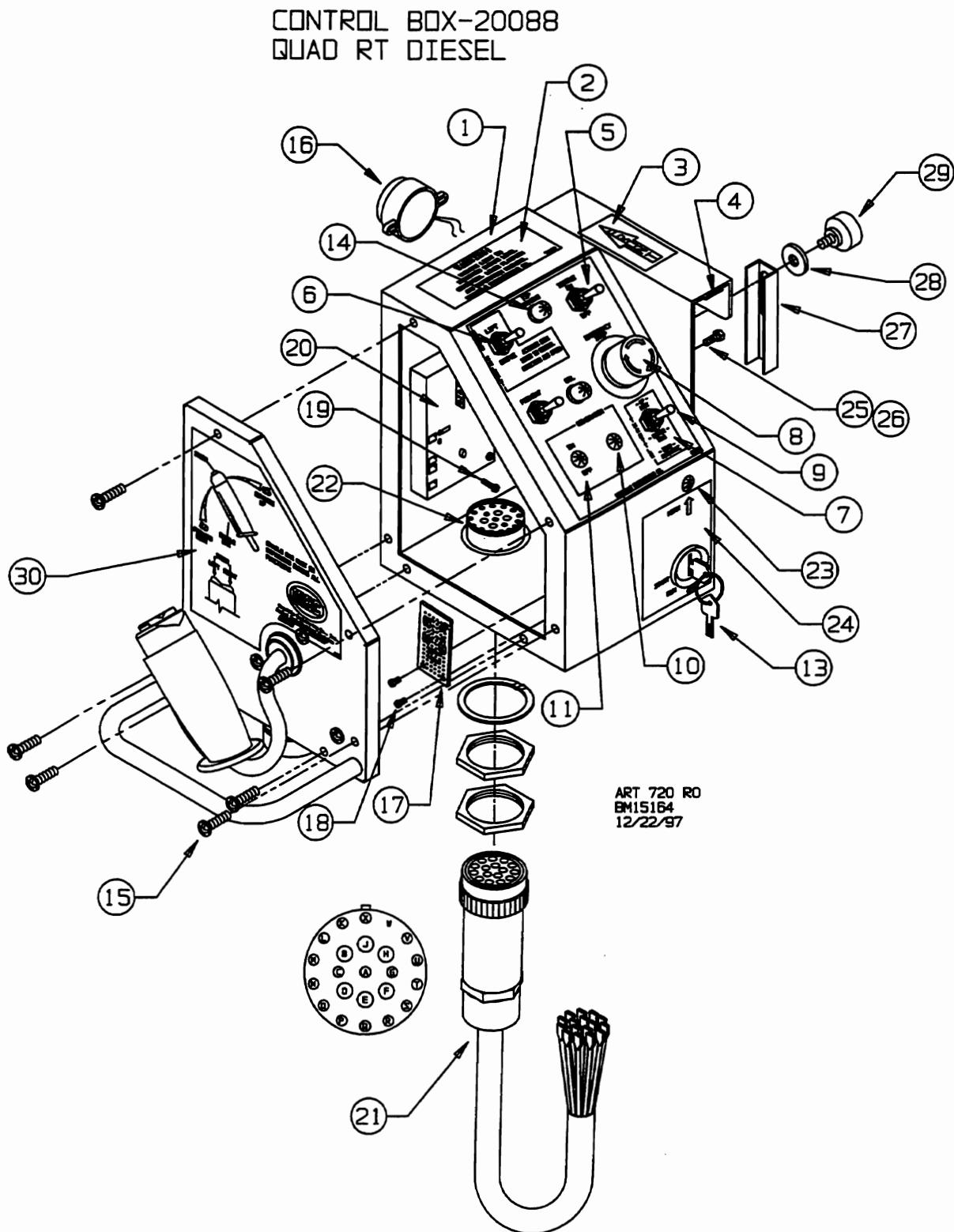
**Figure 3F- Joystick Control Box Assembly D.F. (new style)**



## Figure 3F-Joystick Control Box Assembly D.F. (new style)

ITEM	PART NO.	QTY.	DESCRIPTION
	20082	1	CONTROL BOX ASSEMBLY, RT DUAL FUEL
1	20079	1	CONTROL BOX WELDMENT, JOYSTICK 4WD
2	7827	1	DECAL - WARNING LIGHT-QUADREX
3	7156	1	DECAL - FRONT
4	6350	.5 FT	FOAM TAPE
5	5630	1	SWITCH, TOGGLE, 2 POSITION
6	5275	1	SWITCH, TOGGLE, 2 POSITION
7	8878	1	DECAL, CONTROL BOX, MOTOR CONTR
8	7800	1	SWITCH, STOP, ASSEMBLY
9	6905	1	SWITCH, TOGGLE, 3 POSITION
10	8534	1	LAMP ASSEMBLY, GREEN, GENERATOR OPTION
11	7423	1	SWITCH, TOGGLE, 2 POSITION MOMENTARY
12	8533	1	LAMP ASSEMBLY, RED
13	8869	1	ANTI RESTART KEY SWITCH
	8902	SERV.	REPLACEMENT KEY
14	8532	1	LAMP ASSEMBLY, YELLOW
15	HDW7888	6	MACHINE SCREW, #10-32 X .500, GRADE 2
16	7553	1	ALARM, TIP OVER
17	7451	1	CIRCUIT BOARD - CONTROL BOX
18	HDW5978	2	MACHINE SCREW, #6-32 X .25
19	HDW7561	4	MACHINE SCREW, #6-32 X .75
20	8524	1	VALVE DRIVE BOARD
21	7376	1	WIRE HARNESS, CONTROL BOX CORD
22	8529	1	WIRE HARNESS-JOYSTICK 4WD
23	7579	2-3	PLASTIC PLUG
24	8883	1	DECAL-CONTROL BOX START/STOP
25	HDW5724	1	SCREW, 5/16"-18, 3/4" LONG
26	HDW7120	1	NUT, 5/16"-18
27	13864	1	CONTROL BOX LOCK BRACKET
28	HDW8294	1	WASHER, FLAT 1"
29	8826	1	THUMBSCREW, FLOWER, 5/16"-18
30	8635	1	DECAL, DIRECTIONS, JOYSTICK #2
	8536	1	GENERATOR WIRE HARNESS-JOYSTICK RT (NOT SHOWN)
	7865	2	TERMINAL, COUPLER 1/4 " SPADE (NOT SHOWN)
	8066	1	TAG, INSPECTION LINE (NOT SHOWN)
	7681	2	LAMP, DIALIGHT (NOT SHOWN)

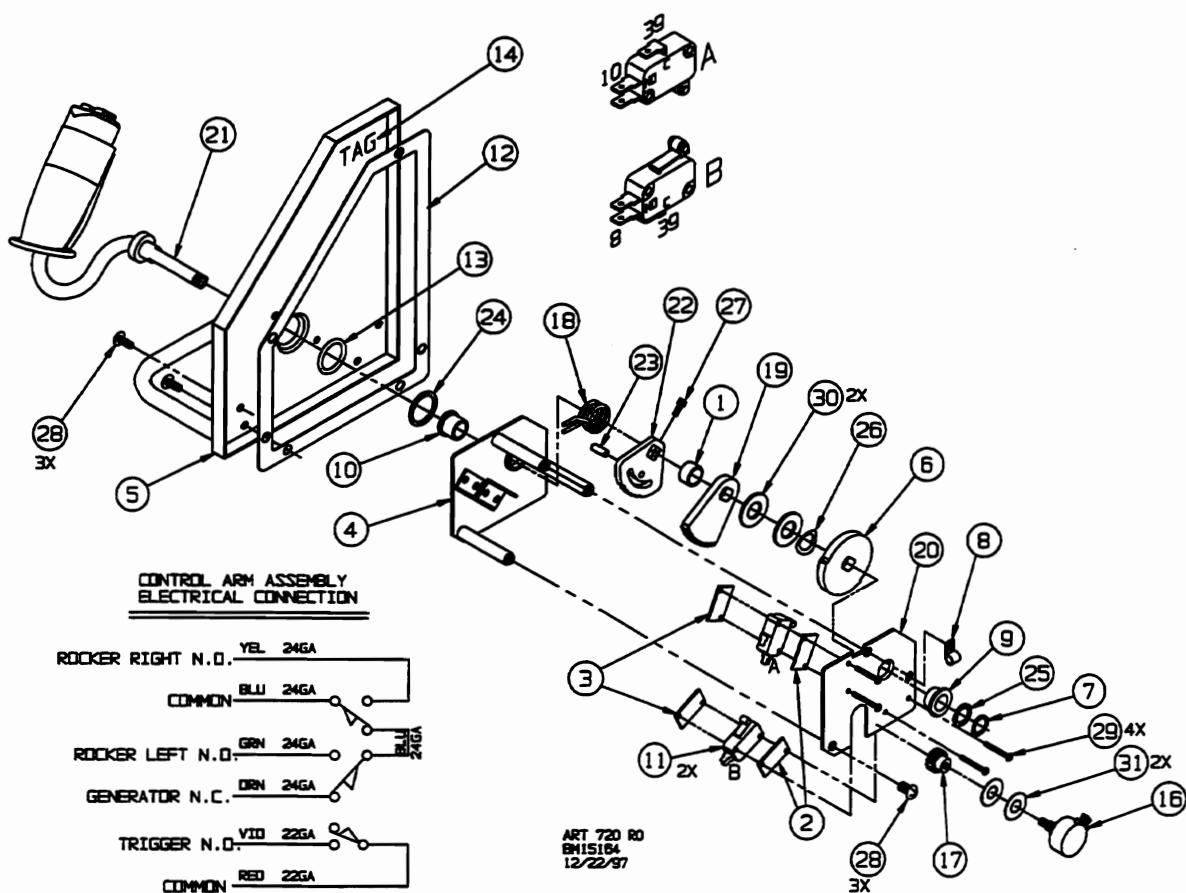
ART 721 R1  
BM15216  
02/24/99

**Figure 3-G Joystick Control Box Assembly Diesel**

**Figure 3-G Joystick Control Box Assembly Diesel**

<b>ITEM</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>DESCRIPTION</b>
	20088	1	CONTROL BOX ASSEMBLY, DIESEL, RT
1	20079	1	CONTROL BOX WELDMENT, JOYSTICK 4WD
2	7827	1	DECAL - WARNING LIGHT-QUADREX
3	7156	1	DECAL - FRONT
4	6350	.5 FT	FOAM TAPE
5	5630	1	SWITCH, TOGGLE, 2 POSITION
6	5275	1	SWITCH, TOGGLE, 2 POSITION
7	8893	1	DECAL - CONTROL BOX, DIESEL
8	7800	1	SWITCH, STOP, ASSEMBLY
9	6905	1	SWITCH, TOGGLE, 3 POSITION
10	8534	1	LAMP ASSEMBLY, GREEN, GENERATOR OPTION
11	7423	1	SWITCH, TOGGLE, 2 POSITION MOMENTARY
12	8533	1	LAMP ASSEMBLY, RED
13	8869	1	ANTI RESTART KEY SWITCH
	8902	SERV.	REPLACEMENT KEY
14	8532	1	LAMP ASSEMBLY, YELLOW
15	HDW7888	6	MACHINE SCREW, #10-32 X .500, GRADE 2
16	7553	1	ALARM, TIP OVER
17	7451	1	CIRCUIT BOARD - CONTROL BOX
18	HDW5978	2	MACHINE SCREW, #6-32 X .25
19	HDW7561	4	MACHINE SCREW, #6-32 X .75
20	8524	1	VALVE DRIVE BOARD
21	7376	1	WIRE HARNESS, CONTROL BOX CORD
22	8529	1	WIRE HARNESS-JOYSTICK 4WD
23	7579	2-3	PLASTIC PLUG
24	8883	1	DECAL-CONTROL BOX START/STOP
25	HDW5724	1	SCREW, 5/16"-18, 3/4" LONG
26	HDW7120	1	NUT, 5/16"-18
27	13864	1	CONTROL BOX LOCK BRACKET
28	HDW8294	1	WASHER, FLAT 1"
29	8826	1	THUMBSCREW, FLOWER, 5/16"-18
30	8635	1	DECAL, DIRECTIONS, JOYSTICK #2
	8536	1	GENERATOR WIRE HARNESS-JOYSTICK RT (NOT SHOWN)
	7865	2	TERMINAL, COUPLER 1/4 " SPADE (NOT SHOWN)
	8066	1	TAG, INSPECTION LINE (NOT SHOWN)
	7681	2	LAMP, DIALIGHT (NOT SHOWN)

ART 720 R0  
BM15164  
12/22/97

**Figure 3H - Joystick Control Box Cam Assembly**



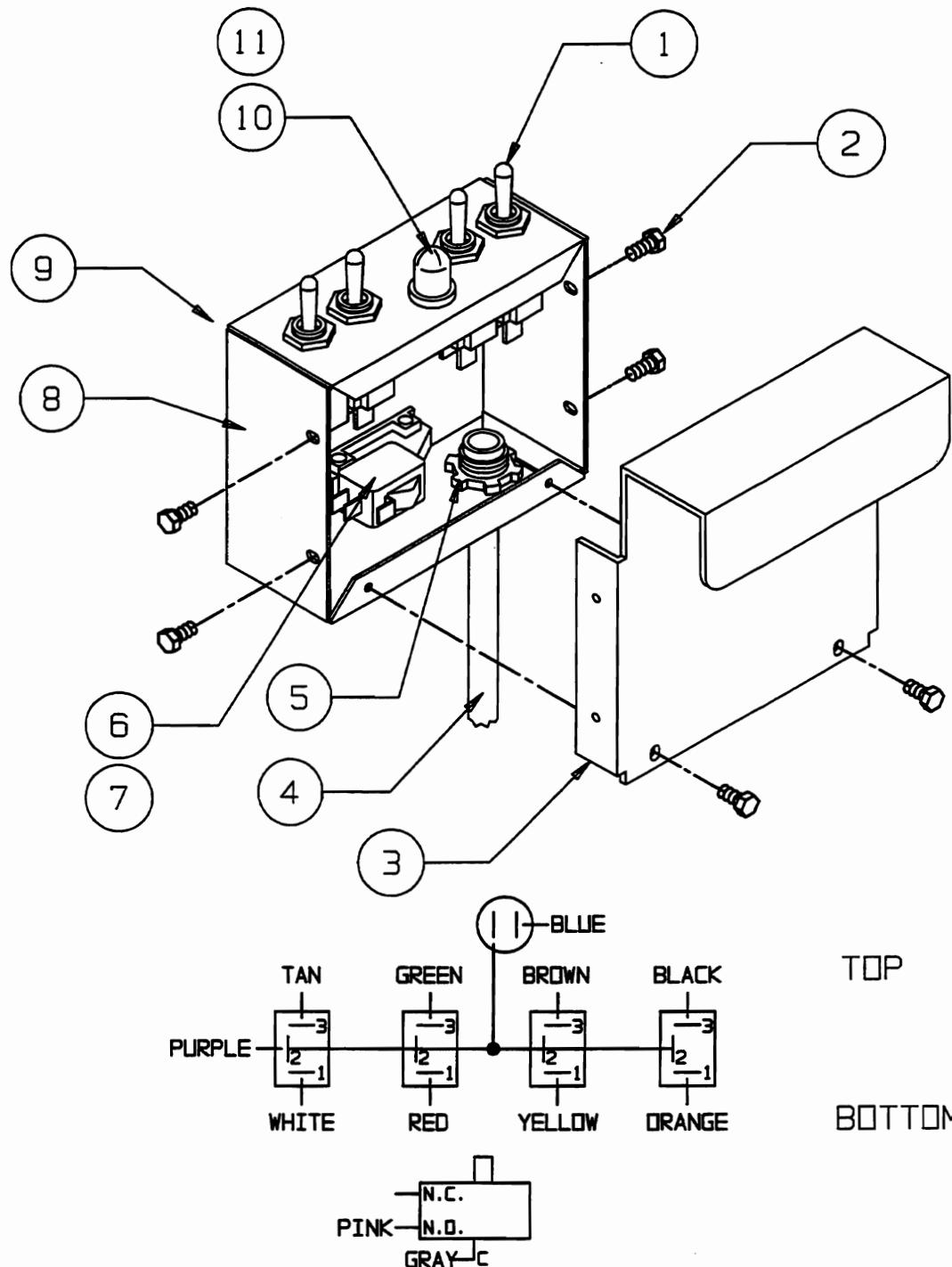
## Figure 3H - Joystick Control Box Cam Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	3763	1	SPACER STEP - JOYSTICK
2	3764	2	SPACER PLATE - JOYSTICK
3	3765	2	STRAP PLATE - JOYSTICK
4	3766	1	TOP PLATE WELDMENT - JOYSTICK
5	3772	1	COVER WELDMENT - JOYSTICK
6	3782	1	DIRECTIONAL CAM - JOYSTICK
7	5736	1	RETAINING RING, EXT. 1/2" SHAFT
8	6917	1	CABLE CLAMP 1/4"
9	7818	1	BEARING, BRONZE FLANGED
10	7819	1	BEARING, BRONZE FLANGED
11	8696	2	SWITCH, LIMIT MICRO - V7
12	7875	1	GASKET - JOYSTICK
13	7882	1	O-RING 7/8" ID X 1 1/8" OD
14	8066	1	TAG, INSPECTION LINE
15	8529	1	WIRE HARNESS - JOYSTICK, 4WD
16	10977 8523	1	POTENTIOMETER ASSEMBLY WIRE HARNESS
17	8389	1	SPUR GEAR
18	8435	1	TORSION SPRING
19	13402	1	LARGE GEAR - PROP JOYSTICK
20	13403	1	BOTTOM PLATE CONTROL BOX - JS
21	20080	1	CONTROL ARM ASSEMBLY
	7476	6	TERMINAL PIN - AMP CONNECTOR
	13638	1	ARM ASSEMBLY - JOYSTICK 90 DEG.
	8880	1	HANDLE - GRIP ASSEMBLY
22	13502	1	CENTERING BRACKET - JOYSTICK
23	100/8348	1	PIN, HOLD DOWN
24	HDW3768	1	WASHER
25	HDW3771	1	WASHER
26	HDW7881	1	WASHER, SPECIAL
27	HDW7887	1	SCREW #6-32, 1/2" LONG
28	HDW7888	6	SCREW #10-32, 1/2" LONG
29	HDW8399	4	SCREW #4-40, 5/8" LONG
30	HDW8531	2	WASHER
31	HDW8567	2	WASHER

ART 720 R0  
BM15164  
12/22/97

**Figure 3I - Outrigger Control Box Assembly**

10912 - OUTRIGGER CONTROL BOX ASSY.

ART308 R3  
BN4955  
5/18/97

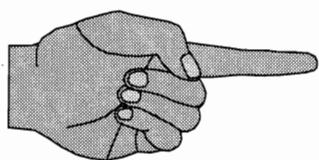
## Figure 3I - Outrigger Control Box Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	5230	4	SWITCH TOGGLE
2	5978	6	BTSTFPAN CRR #6 320.25Z 5Y
3	10862	1	BOX CONTROL REAR-OUTRIGGER
4	8012	1	WIRE HARNESS OUTER CONTROL BOX
5	8006	1	NUT, CONNECTOR 1/2" CONDUIT
6	8044	1	SWITCH-MOTION OUTRIGGER
	8819	SERV	RUBBER BOOT MOTION SWITCH
7	1313	1	SWTICH GUARD
8	10863	1	BOX CONTROL-OUTRIGGER-FRONT
9	8000	1	DECAL-CONTROL BOX-OUTRIGGER
10	7679	1	LIGHT INDICATOR-YELLOW
11	7681	1	LAMP, DIALIGHT

  
Autodesk Inventor  
Version 13  
Build 0600  
03/10/07



# Notes:

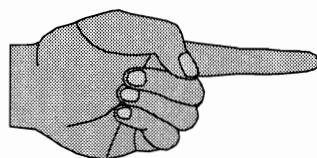


**Next Page**

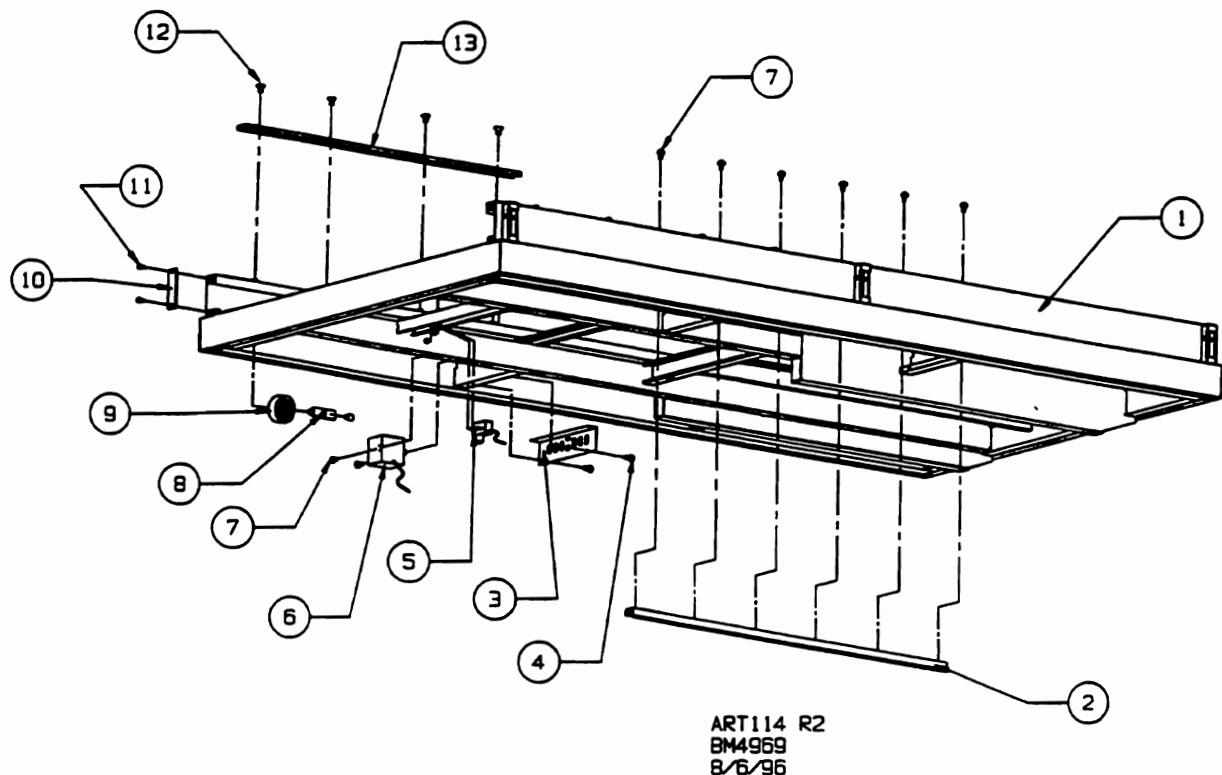
## Platform & Rails



# Notes:



Next Page

**Figure 4A - Main Platform Assembly**

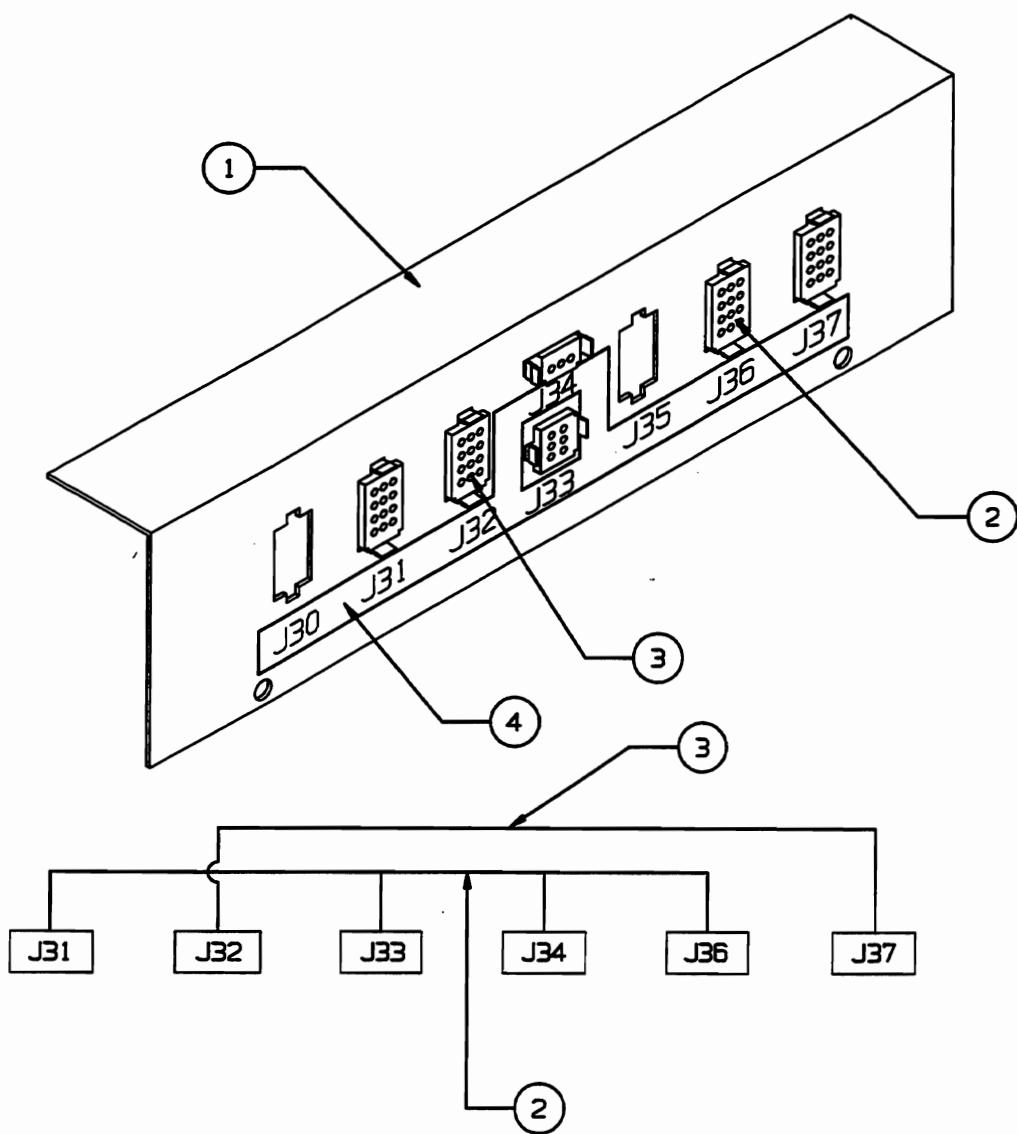
**Figure 4A - Main Platform Assembly**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10128	1	PLATFORM WELDMENT
2	10530	2	ROLLER CHANNEL WELDMENT
3	10966	1	PLATFORM CONNECTOR ASSEMBLY
	10443	1	JUNCTION COVER PLATE
	7894	1	WIRING DECAL
	8541	1	PLATFORM WIRING HARNESS - JOYSTICK
4	HDW6455	2	SCREW, 1/4-20 X 1/2, GRADE 5
5	10733	1	UPPER LIMIT SWITCH ASSEMBLY
	10511	1	UPPER LIMIT SWITCH PLATE
	6456	1	CORD GRIP - STEEL
	6715	1	LIMIT SWITCH
	7520	1	WIRE HARNESS, FAST SPEED LIMIT
	HDW7684	2	SCREW, #6-32 X 1 1/2
6	10775	1	TIP ALARM SUB ASSEMBLY
	7435	1	TIP OVER ALARM
	7495	1	JUNCTION BOX
	7528	1	WIRE HARNESS, WARNING HORN
	7914	2	CABLE TIE
	7963	2	CONNECTOR - BUTT SPLICE 14 GA.
	HDW8530	2	SCREW, #8-32 X 1 1/2, OVAL COUNTERSINK
7	HDW5723	16	SCREW, 1/4-20 X 3/4
8	10267	2	ROLLER AXLE WELDMENT
9	7393	2	EXTENSION ROLLER, PLATFORM, 1 1/2 X 4
10	10525	2	PLATFORM ROLLER STOP PLATE
11	HDW6432	4	SCREW, 3/8-16 X 3/4, GRADE 5
12	HDW7399	8	SCREW, 5/16-18 X 1/2, GRADE 8
13	10350	2	LOCK CHANNEL

ART114 R2  
BM4969  
8/6/96

## Figure 4B - Platform Connector Strip

QUAD 25' & 33' RT'S  
SERIAL #10800101-10800214  
10700101-10700166



FULL ASSEMBLY #10586

ART-31882  
SCALE 1/2

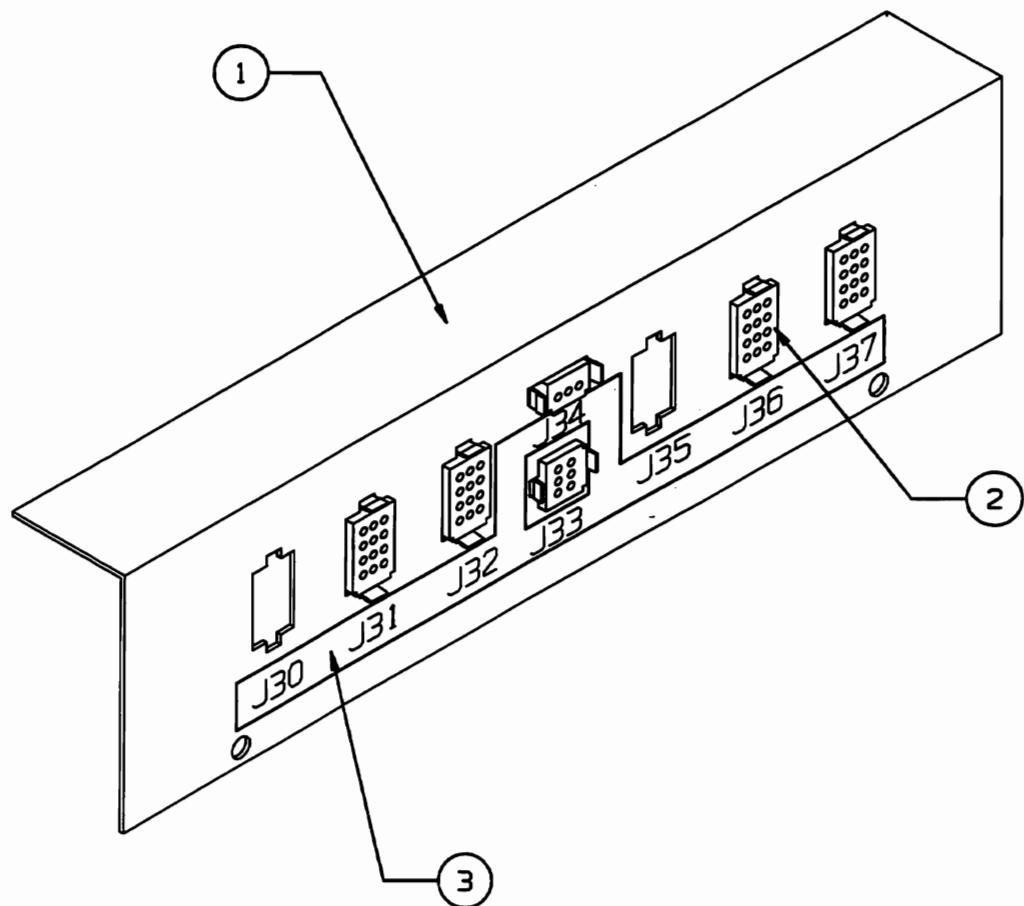
## Figure 4B - Platform Connector Strip

ITEM	PART NO.	QTY.	DESCRIPTION
1	10443	1	COVER PLATE - JUNCTION
2	7494	1	WIRE HARNESS - #1 PLATFORM
3	7587	1	WIRE HARNESS #2 PLATFORM
4	7894	1	DECAL-WIRING J30-J37 QUADREX

REV-B  
SCALE 1/2

**Figure 4C - Platform Connector Strip Joystick**

QUAD 25' & 33' RT'S  
SERIAL #10800215-PRESENT  
#10700167-PRESENT



FULL ASSEMBLY #10966

ART-554R1  
SCALE 1/2



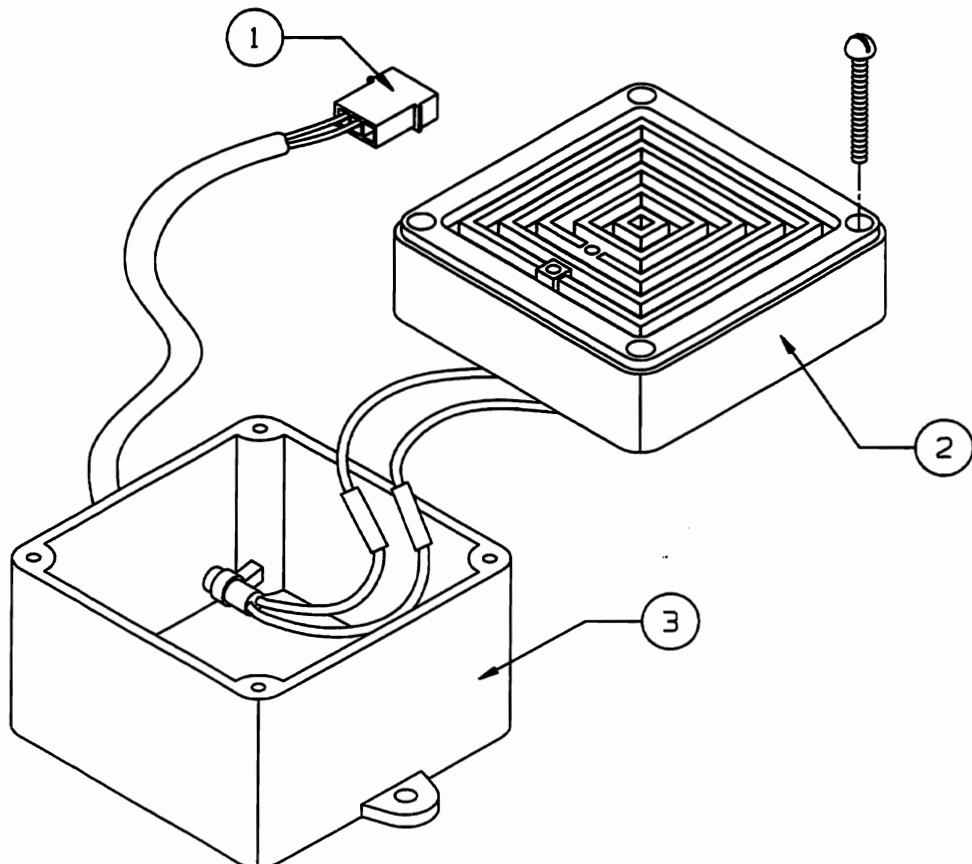
## Figure 4C - Platform Connector Strip Joystick

ITEM	PART NO.	QTY.	DESCRIPTION
1	10443	1	COVER PLATE - JUNCTION
2	8541	1	WIRE HARNESS PLATFORM JS RT
3	7894	1	DECAL WIRING - J30-J37 QUADREX
	7587	OPTL	WIRE HARNESS (OUTRIGGER OPTION)

ART-554R1  
SCALE 1/2

## Figure 4D - Tilt Alarm Assembly

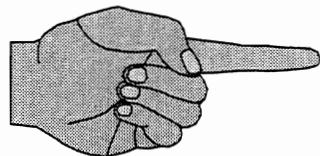
10775 TIP ALARM ASSEMBLY



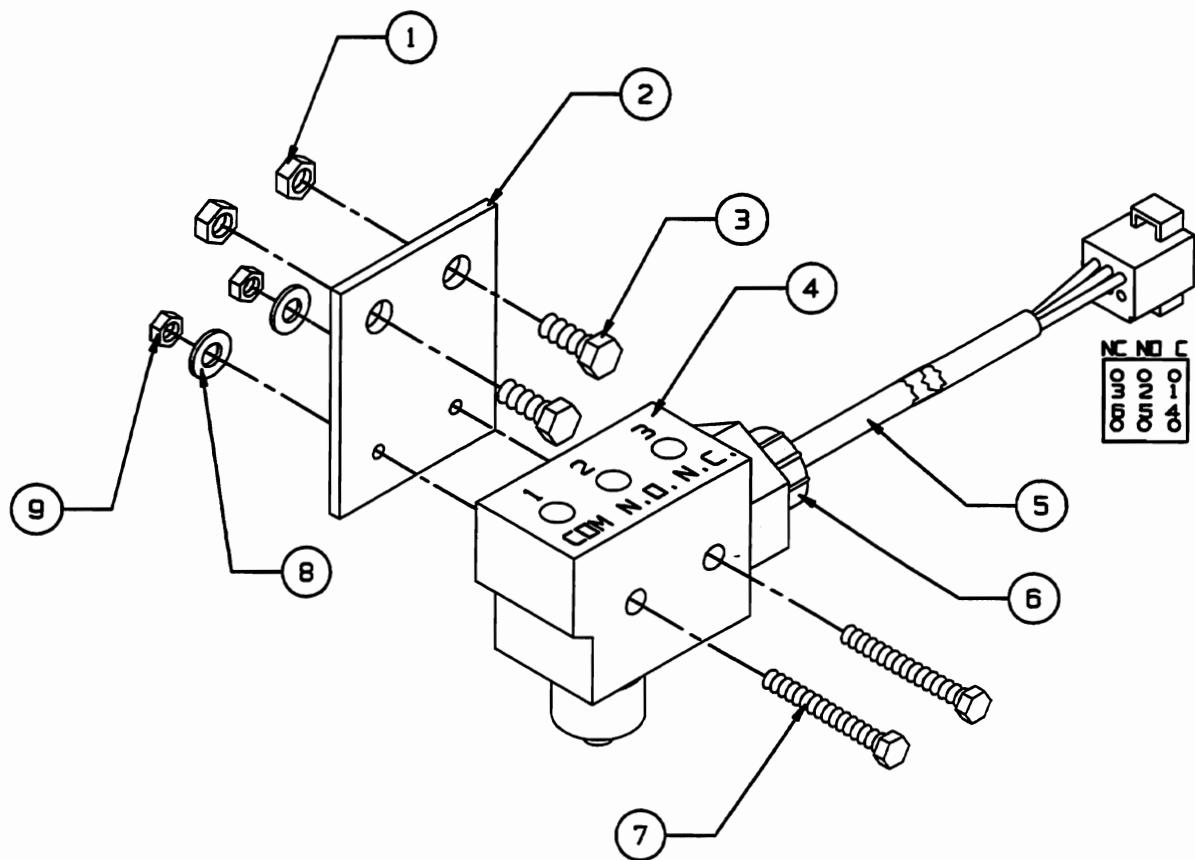
ART349 R1  
BNS084  
08/01/97

ITEM	PART NO.	QTY.	DESCRIPTION
1	7528	1	WIRE HARNESS - WARNING HORN
2	7435	1	ALARM, TIP OVER
3	7495	1	JUNCTION BOX

# Notes:



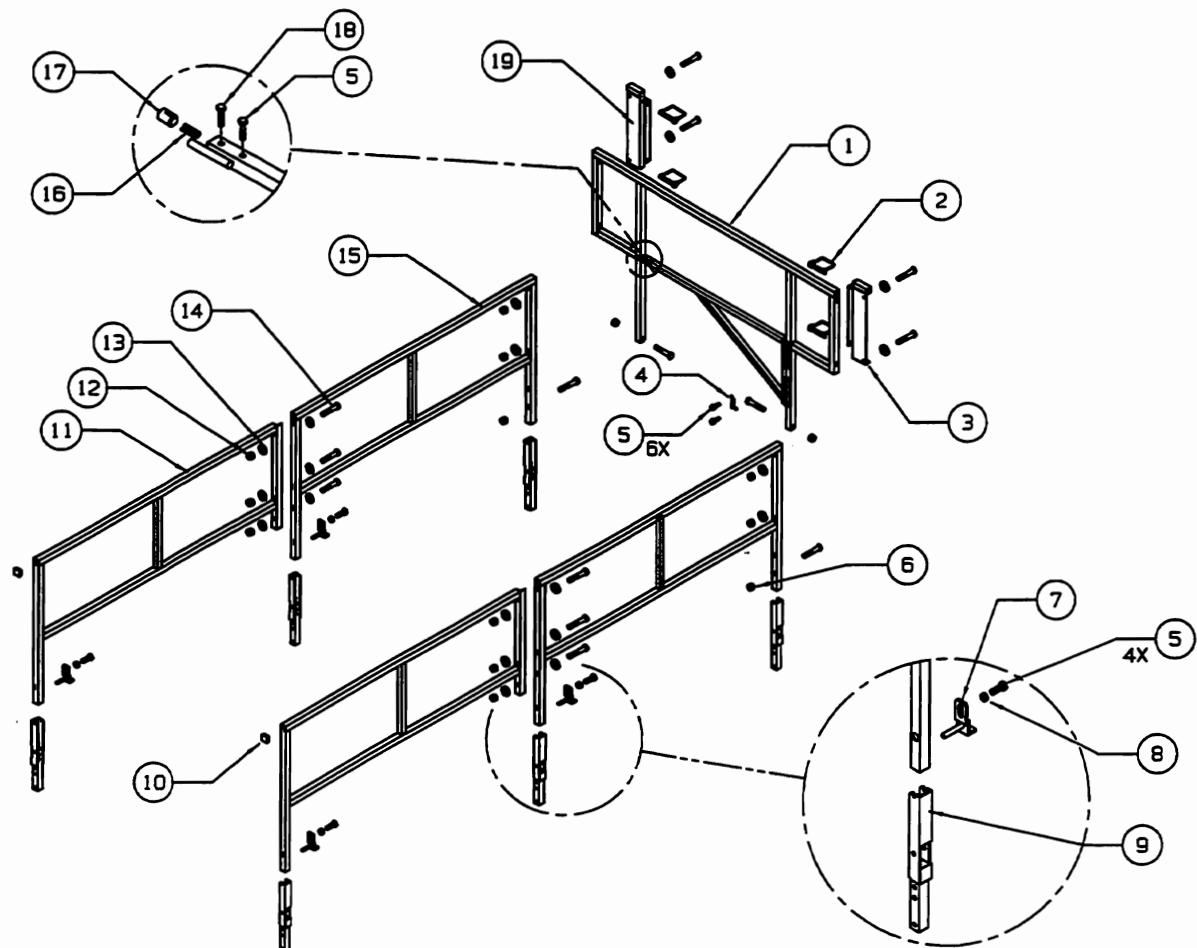
**Next Page**

**Figure 4E - Slow Speed Limit Switch Assembly**ART-318R1  
SCALE 2/3

## Figure 4E - Slow Speed Limit Switch Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	HDW5276	2	NTHEX 0.250 20Z 5N
2	10511	1	UPPER LIMIT - SWITCH PLATE
3	HDW5723	2	BTSTFHEX .250 200.75ZSTLY
4	6715	1	LIMIT SWITCH
5	7520	1	WIRE HARNESS FAST SPEED LIMIT
6	6456	1	CORD GRIP-STEEL
7	HDW7684	2	BTMCHHEX #6 321.50ZSTLN
8	HDW4773	2	WRFLAT 0.1710.7620.059STYNY
9	HDW5364	2	NTHEXKEP 6 32Z 5N

ART-318R1  
SCALE 2/3

**Figure 4F - Main Platform Rail Assembly**ART131 R3  
BM4929

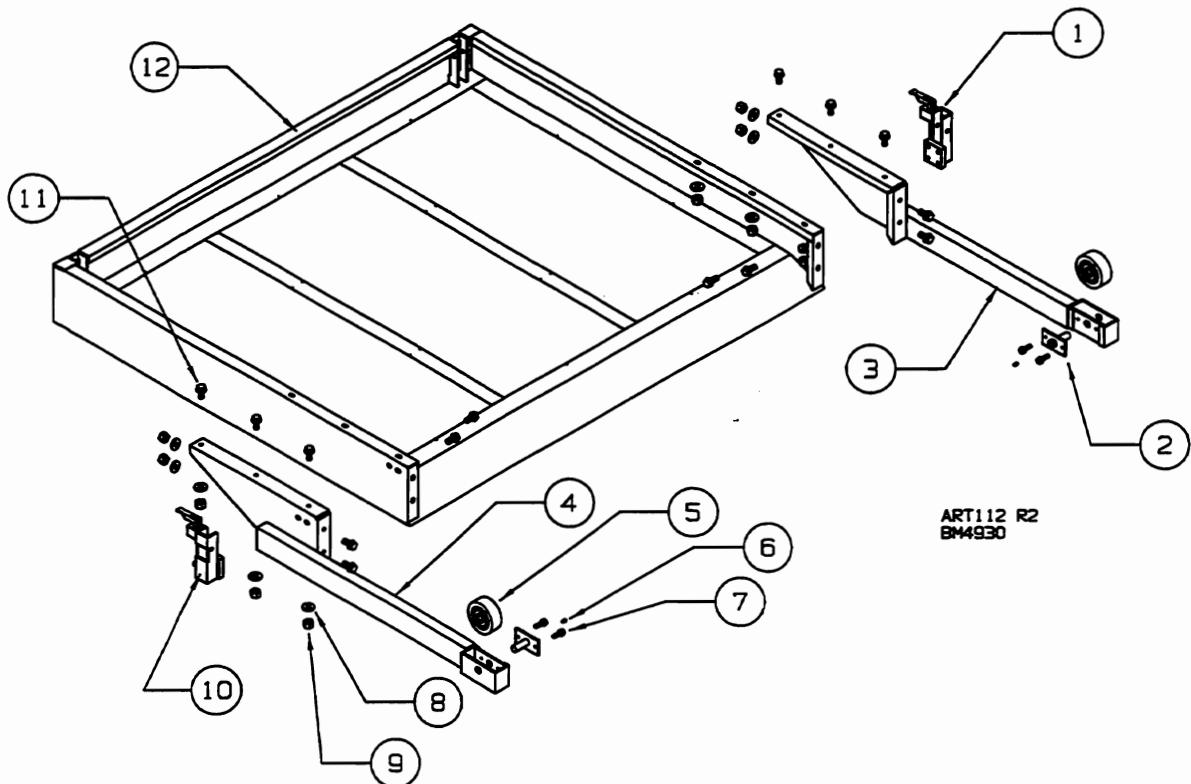
## Figure 4F - Main Platform Rail Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	10231	1	REAR GATE WELDMENT
2	HDW7593	4	WIRE LOCK PIN, SQUARE, .37 DIA, 2 1/4" LONG
3	10553	1	RAILING CAP WELDMENT - LEFT
4	7153	6	PLATFORM GATE SPRING
5	HDW5723	7	SCREW, 1/4"-20 X 3/4"
6	HDW6281	8	LOCK NUT, 2 WAY, 3/8"-16, GRADE 5
7	10148	4	HINGE LOCK WELDMENT
8	100623B	4	CAM ROLLER
9	10514	6	DROP DOWN RAIL MOUNT
10	6823	6	CAPLUG 1 1/4" SQUARE TUBING
11	10513	2	FRONT DROP DOWN RAIL WELDMENT
12	HDW5039	10	NUT, 3/8"-16, GRADE 5
13	HDW5355	20	FLAT WASHER, 7/16" ID, 1" OD
14	HDW6434	16	SCREW, 3/8"-16 X 2", GRADE 5
15	10512	2	REAR DROP DOWN RAIL WELDMENT
16	7374	1	HOLD DOWN SPRING
17	10561	1	LATCH PIN, REAR GATE
18	HDW6455	1	SCREW, 1/4"-20 X 1/2", GRADE 5
19	10552	1	RAILING CAP WELDMENT - RIGHT
	7049	1	RAIL PAD COVER
	7805	3	RAIL PAD

STANDARD PLATFORM REQUIRES (NOT SHOWN):

10720	1	KICK PANEL WELDMENT
10719	1	FRONT RAIL WELDMENT
10552	1	RAILING CAP WELDMENT, LEFT
10553	1	RAILING CAP WELDMENT, RIGHT
HDW7593	2	WIRE LOCK PIN, SQUARE, .37 DIA, 2 1/4" LONG

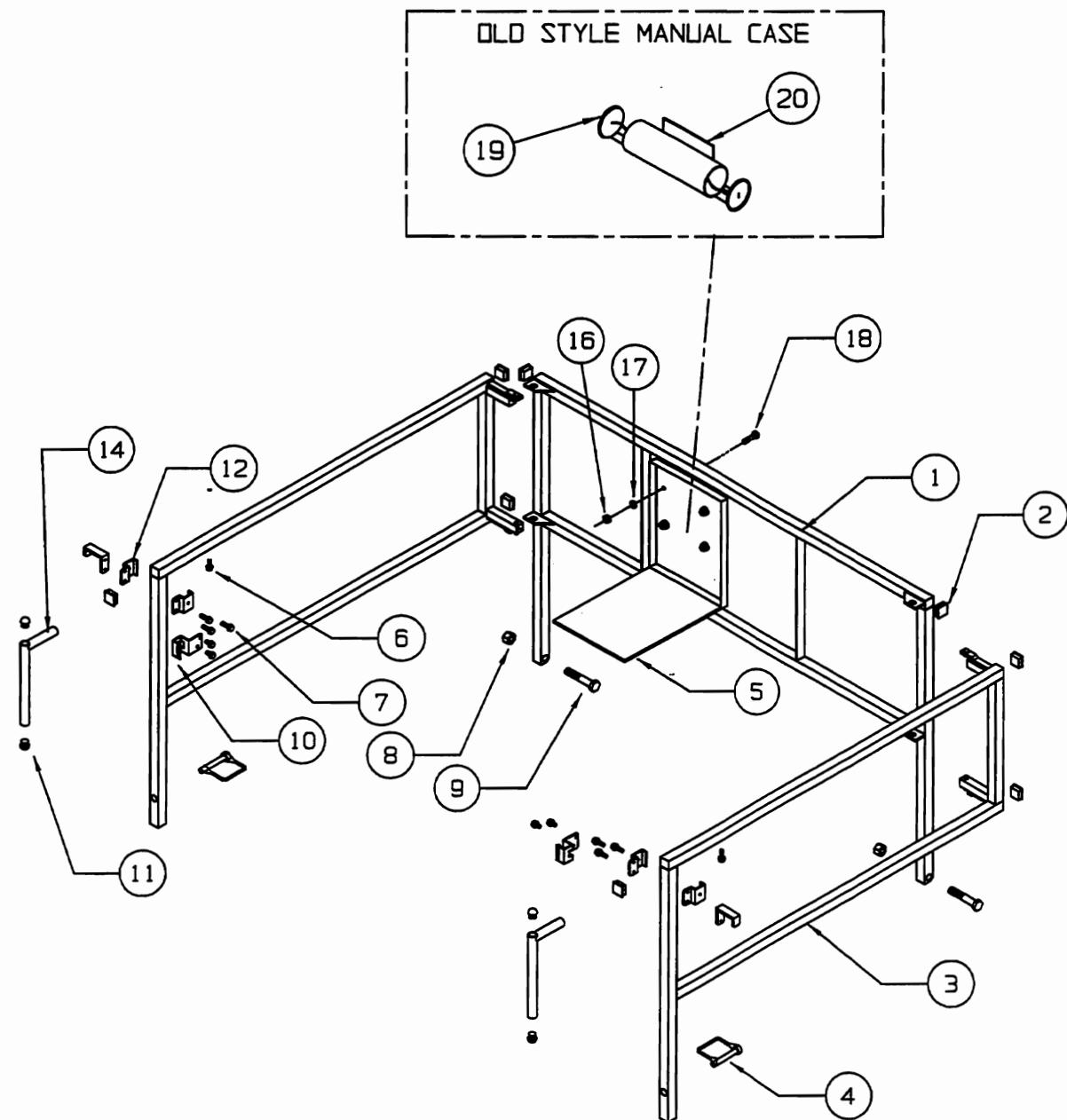
ART131 R3  
BM4929

**Figure 4G - Extended Platform Assembly**

## Figure 4G - Extended Platform Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	10451	1	RAILING HINGE WELDMENT - R.H.
2	10264	2	ROLLER AXLE WELDMENT
3	10214	1	EXTENSION PLATFORM ROLLER WELDMENT - R.H.
4	10207	1	EXTENSION PLATFORM ROLLER WELDMENT - L.H.
5	7393	2	ROLLER EXTENSION PLATFORM, 1 1/2 X 4
6	5432	2	GREASE FITTING
7	HDW6455	4	SCREW, 1/4-20 X 1/2, GRADE 5
8	HDW5355	14	FLAT WASHER, 7/16 ID, 1.00 OD, 5/64 THICK
9	HDW5039	10	HEX NUT, 3/8-16, GRADE 5
10	10493	1	RAILING HINGE WELDMENT - L.H.
11	HDW6433	14	SCREW, 3/8-16 X 1.00, GRADE 5
12	10157	1	EXTENDING PLATFORM WELDMENT
	7434	3	FLOOR BOARD (NOT SHOWN)

ART112 R2  
BM4930

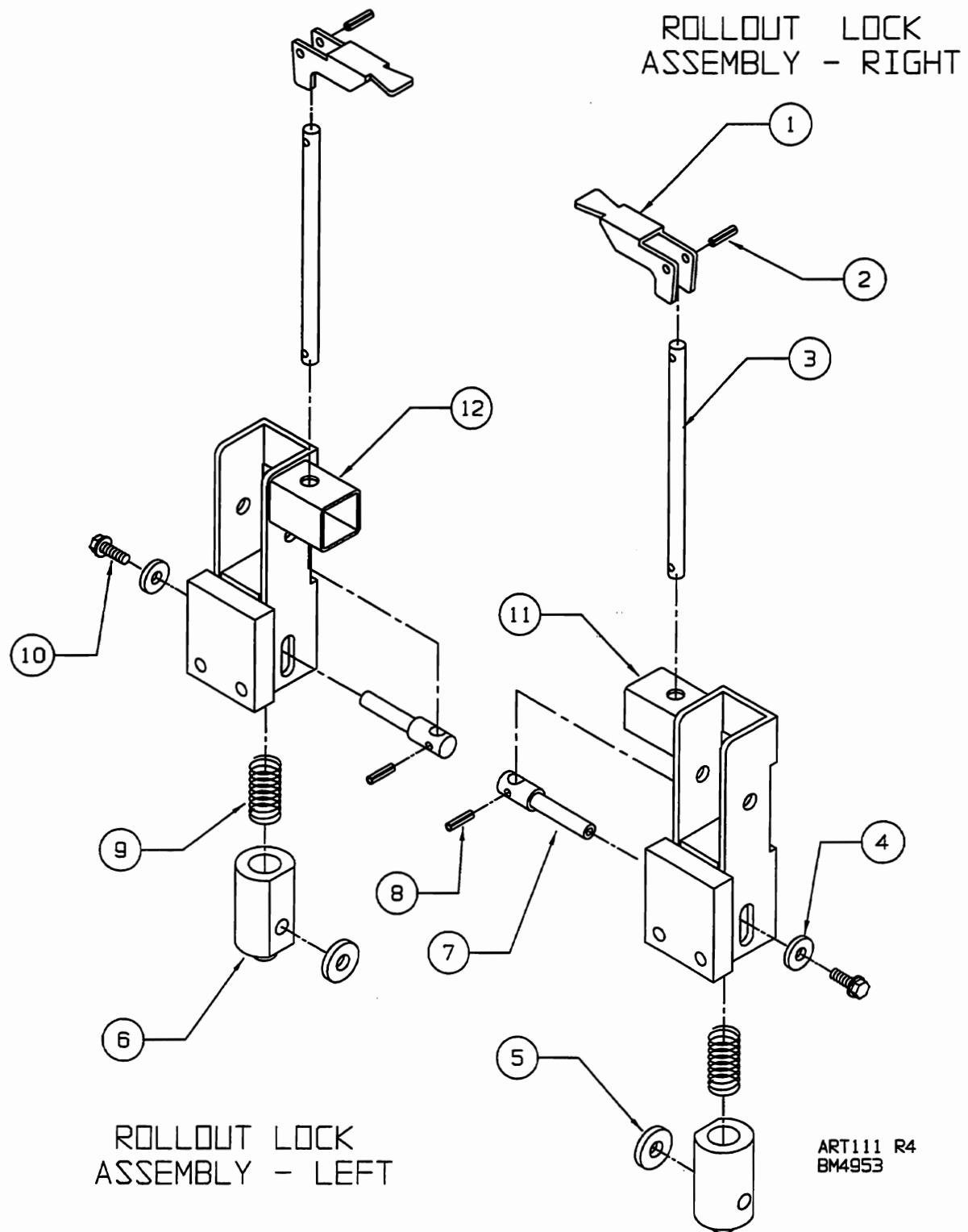
**Figure 4H - Extended Platform Rail Assembly**

ART130 R3  
BM4958  
02/25/99

## Figure 4H - Extended Platform Rail Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	10255	1	EXTENSION PLATFORM RAIL, FRONT WELDMENT
2	6823	8	CAPLUG, 1 1/4 SQUARE TUBING
3	10538	1	EXTENSION PLATFORM RAILING R.H.
4	HDW7593	2	WIRE LOCK PIN - SQUARE
5	8909	1	MANUAL ENCLOSURE
6	HDW5723	2	SCREW, 1/4-20 X 3/4
7	HDW6455	12	SCREW, 1/4-20 X 1/2, GRADE 5
8	HDW6281	2	HEX LOCK NUT, 3/8-16, GRADE 5
9	HDW6434	2	SCREW, 3/8-16 X 2.00, GRADE 5
10	10731	2	HANDLE CLIP
11	6342	4	TUBING END PLUG
12	10506	4	RAILING SIDE SUPPORT
13	10505	2	TOP RAILING SUPPORT
14	10727	2	HANDLE - PUSH/PULL WELDMENT
15	10537	1	EXTENSION PLATFORM RAILING - L.H.
16	HDW6461	4	NUT, 1/4"-20
17	HDW8294	4	FLAT WASHER
18	HDW6455	4	SCREW, 1/4"-20, 1/2" LONG
19	3788	SERV.	COVER ASS'Y, MANUAL TUBE
20	11323	SERV.	MANUAL TUBE

ART130 R3  
BM4958  
02/25/99

**Figure 4I - Extended Platform Lock Assembly**

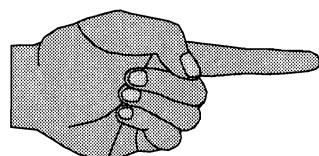
**Figure 4I - Extended Platform Lock Assembly**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10476	2	LOCK LEVER
2	100/8348	2	HOLD DOWN PIN
3	10488	2	LEVER PIN
4	HDW8552	2	FLAT WASHER, .281 ID, .625 OD
5	HDW467	2	FLAT WASHER, .390 ID, 1.00 OD
6	10454	2	ADJUSTING PLATFORM PIN
7	10485	2	ADJUSTING PIN SHAFT
8	HDW7455	2	SLOTTED SPRING PIN
9	7408	2	DECK LOCK SPRING
10	HDW6455	2	SCREW, 1/4"-20 X 1/2", GRADE 5
11	10451	1	RAILING HINGE WELDMENT-RIGHT
12	10493	1	RAILING HINGE WELDMENT-LEFT

ART111 R4  
BM4953



# Notes:

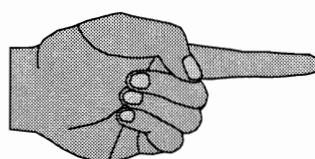


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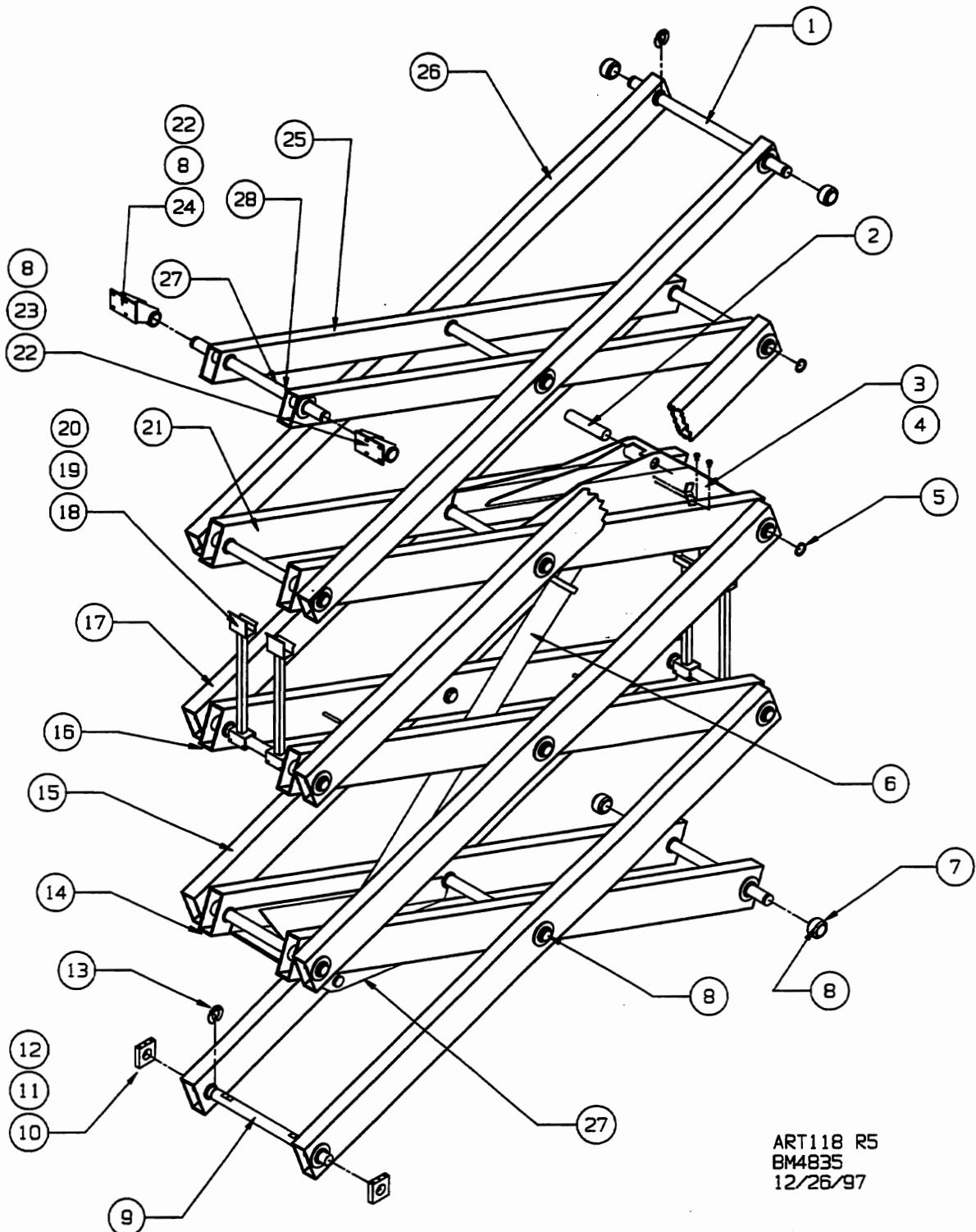
**Scissors & Lift Mech.**



# Notes:



[Next Page](#)

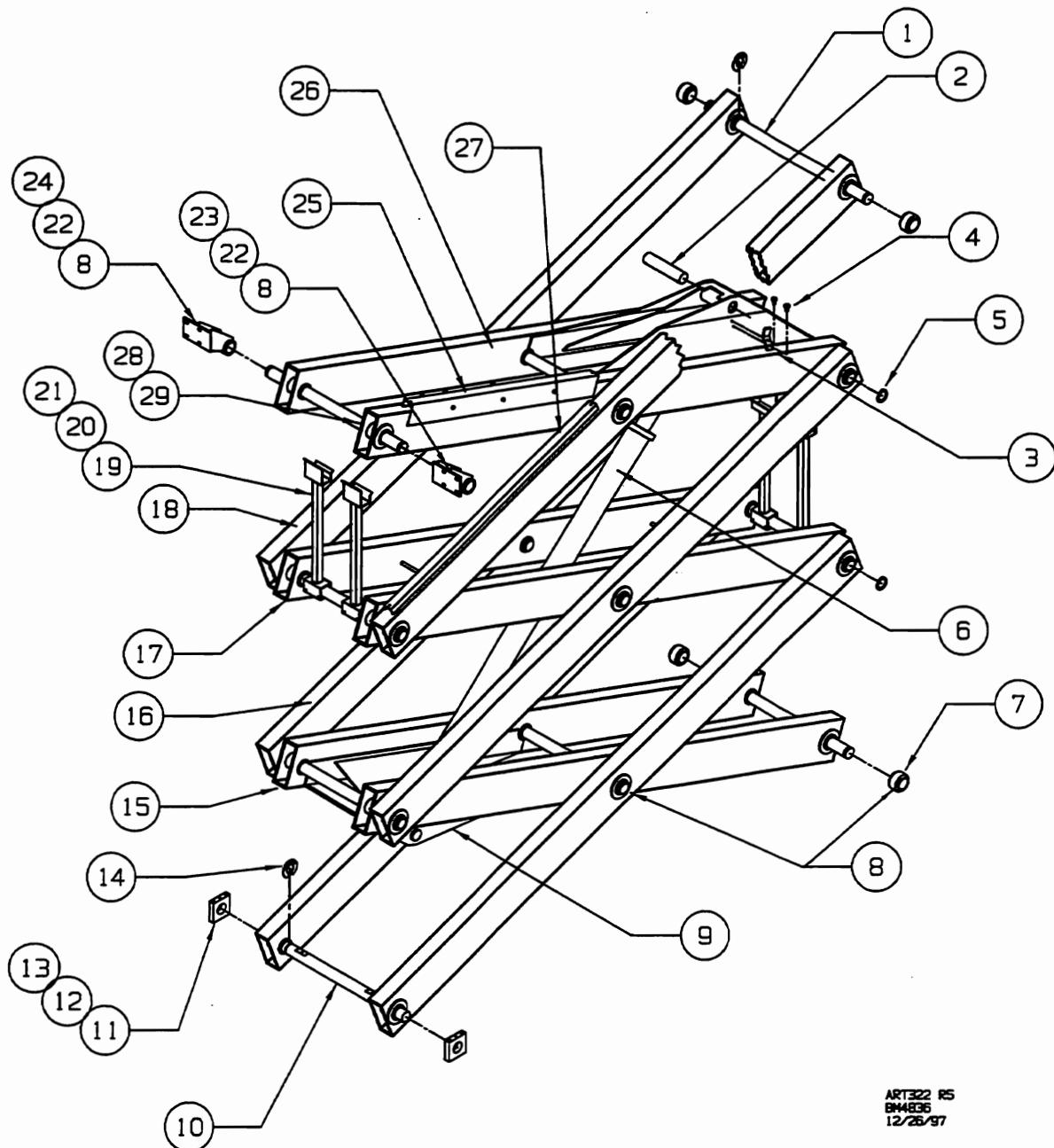
**Figure 5A - 33ft. Scissor Assembly**

ART118 R5  
BM4835  
12/26/97

**Figure 5A - 33ft. Scissor Assembly**

ITEM	PART NO.	QTY.	DESCRIPTION
1	8340	1	PLATFORM ROLLER PIN
2	8335	2	CYLINDER PIN
3	10015	4	CYLINDER PIN - LOCK PLATE
4	HDW5723	8	SCREW, 1/4-20 X 3/4 - TAPTITE
5	6701	18	RETAINING RING - 2" SHAFT
6	10925	1	LIFT CYLINDER, WITH BEARINGS-U.S.
	8656	1	LIFT CYLINDER, WITH BEARINGS-EUROPE
7	3110	4	ROLLER - BASE
8	6669	56	BEARING - 32DU32
9	8338	1	PIVOT PIN
10	10324	1	SCISSOR MOUNTING BLOCK
11	HDW7441	4	CAP SCREW, 1/2-13 X 1/2, GRADE 8
12	HDW7442	2	SET SCREW, FLAT POINT, 3/8-16 X 1.00, GRADE 8
13	6688	4	KLIP RING 2" SHAFT
14	10025	1	INNER BEAM WELDMENT - CYLINDER MOUNT-LOWER
15	10020	4	BEAM WELDMENT - OUTER
16	10027	1	INNER BEAM WELDMENT - CENTER
17	10019	2	OUTER BEAM WELDMENT
18	HDW6455	16	SCREW, 1/4-20 X 1/2, GRADE 5
19	3219	4	LOWER BRACKET - MAINTENANCE LOCK
20	10377	2	MAINTENANCE LOCK WELDMENT
21	10026	1	INNER BEAM WELDMENT - CYLINDER MOUNTING UPPER
22	HDW6432	8	SCREW, 3/8-16 X 3/4, GRADE 5
23	10425	1	MOUNTING BRACKET WELDMENT - LH PLATFORM
24	10417	1	MOUNTING BRACKET WELDMENT - RH PLATFORM
25	10028	1	INNER BEAM WELD - UPPER
26	10021	1	BEAM WELD - OUTER
27	9146	1	CLAMP, 1 13/16", 2 3/4" HOSE
28	9147	1	SPRING, 1 5/8 X 10" LONG

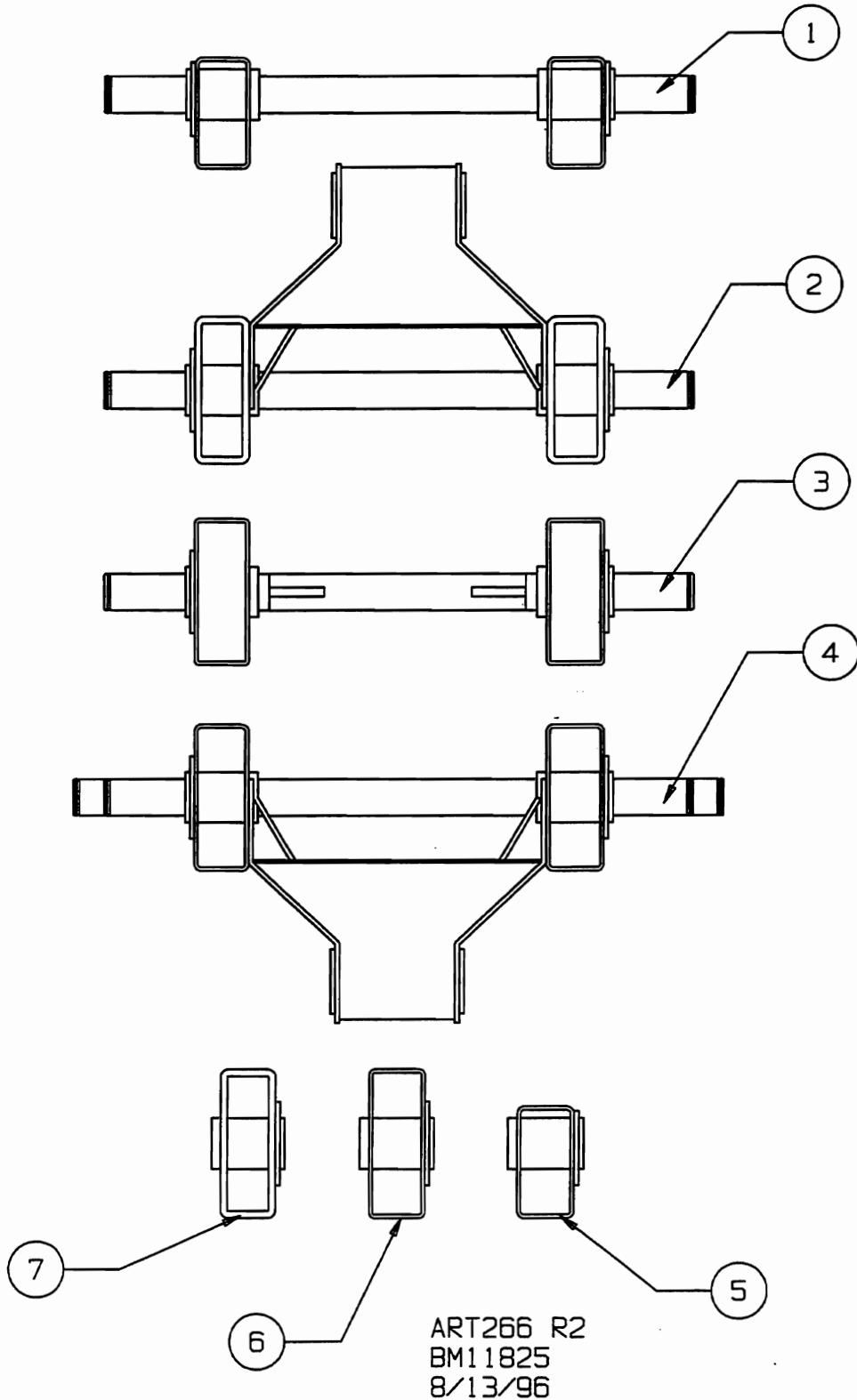
ART118 RS  
BM4835  
12/26/97

**Figure 5B - 25ft. Scissor Assembly**

## Figure 5B - 25ft. Scissor Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	8340	1	PLATFORM ROLLER PIN
2	8335	2	CYLINDER PIN
3	10015	4	CYLINDER PIN - LOCK PLATE
4	HDW5723	8	SCREW, 1/4-20 X 3/4 - TAPTITE
5	6701	18	RETAINING RING - 2" SHAFT
6	10925	1	LIFT CYLINDER, WITH BEARINGS-U.S.
	8656	1	LIFT CYLINDER, WITH BEARINGS-EUROPE
7	3110	4	ROLLER - BASE
8	6669	48	BEARING - 32DU32
9	10475	1	HOSE GUIDE - LIFT CYLINDER
10	8338	1	PIVOT PIN
11	HDW7441	4	CAP SCREW, 1/2-13 X 1/2, GRADE 8
12	HDW7442	2	SET SCREW, FLAT POINT, 3/8-16 X 1.00, GRADE 8
13	10324	2	SCISSORS MOUNTING BLOCK
14	6688	4	KLIP RING - 2" SHAFT
15	10025	1	INNER BEAM WELDMENT - CYLINDER MOUNT-LOWER
16	10020	4	BEAM WELDMENT - OUTER
17	10027	1	INNER BEAM WELDMENT - CENTER
18	10019	2	OUTER BEAM WELDMENT
19	HDW6455	16	SCREW, 1/4-20 X 1/2, GRADE 5
20	3219	4	LOWER BRACKET - MAINTENANCE LOCK
21	10377	2	MAINTENANCE LOCK WELDMENT
22	HDW6432	8	SCREW, 3/8-16 X 3/4, GRADE 5
23	10425	1	MOUNTING BRACKET WELDMENT - LH PLATFORM
24	10417	1	MOUNTING BRACKET WELDMENT - RH PLATFORM
25	10549	1	CONTROL CORD GUARD-SHORT
26	10026	1	INNER BEAM WELDMENT - CYLINDER MOUNTING UPPER
27	10550	1	CONTROL CORD GUARD-LONG
28	9146	1	CLAMP, 1 13/16" 2 3/4" HOSE
29	9147	1	SPRING, 1 5/8" X 10" LONG

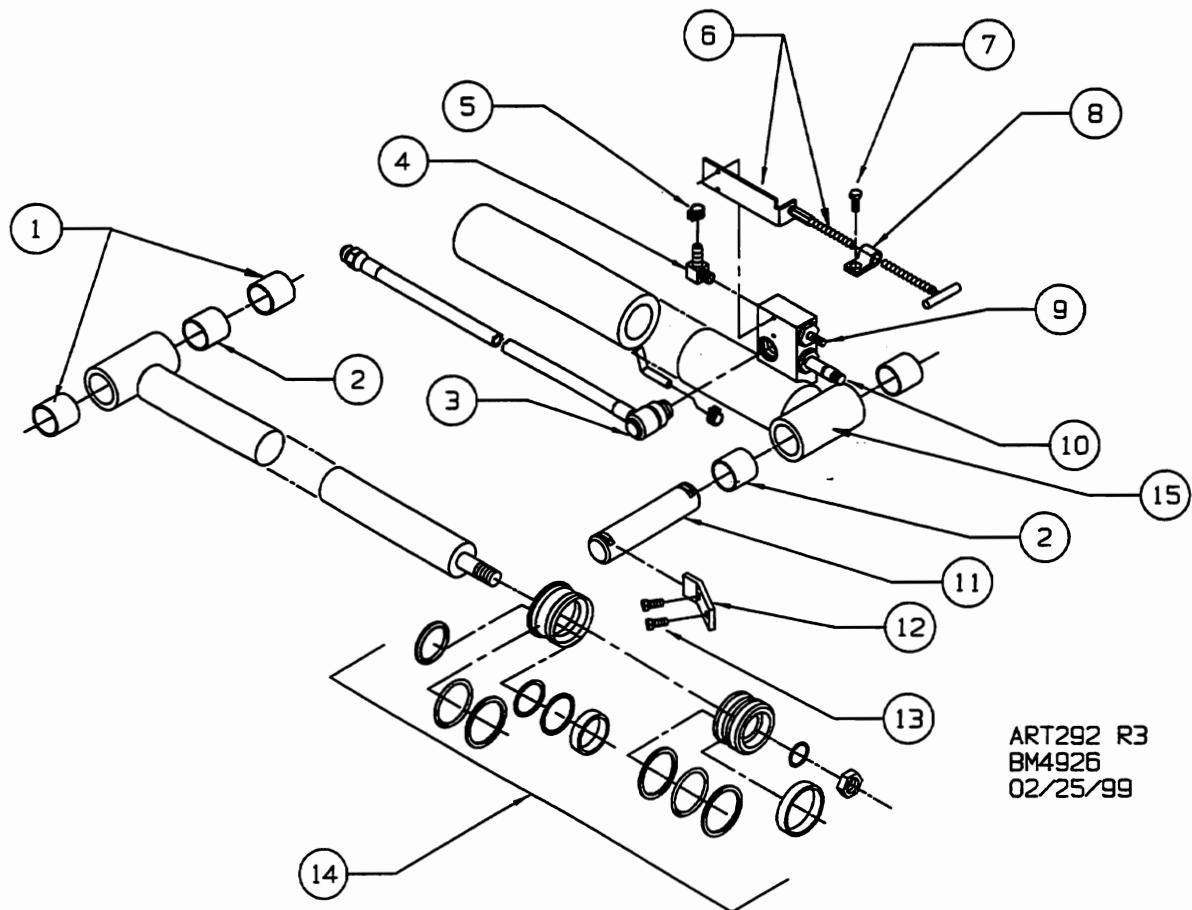
ART322 RS  
BM4636  
12/26/97

**Figure 5C - Scissor Identification**

## Figure 5C - Scissor Identification

ITEM	PART NO.	QTY.	DESCRIPTION
1	10028	1	INNER BEAM WELD - UPPER
2	10026	1	INNER BEAM WELD CYL. MTG. UPPER
3	10027	1	INNER BEAM WELD - CENTER
4	10025	1	INNER BEAM WELD-CYL. MTG. LOWER
5	10021	1	BEAM WELD-OUTER-.187X3X6
6	10020	1	BEAM WELD OUTER-.187X3X8
7	10019	1	BEAM WELD OUTER-1/4X3X8

ART266 R2  
BM11825  
8/13/96

**Figure 5D - Lift Cylinder Assembly**

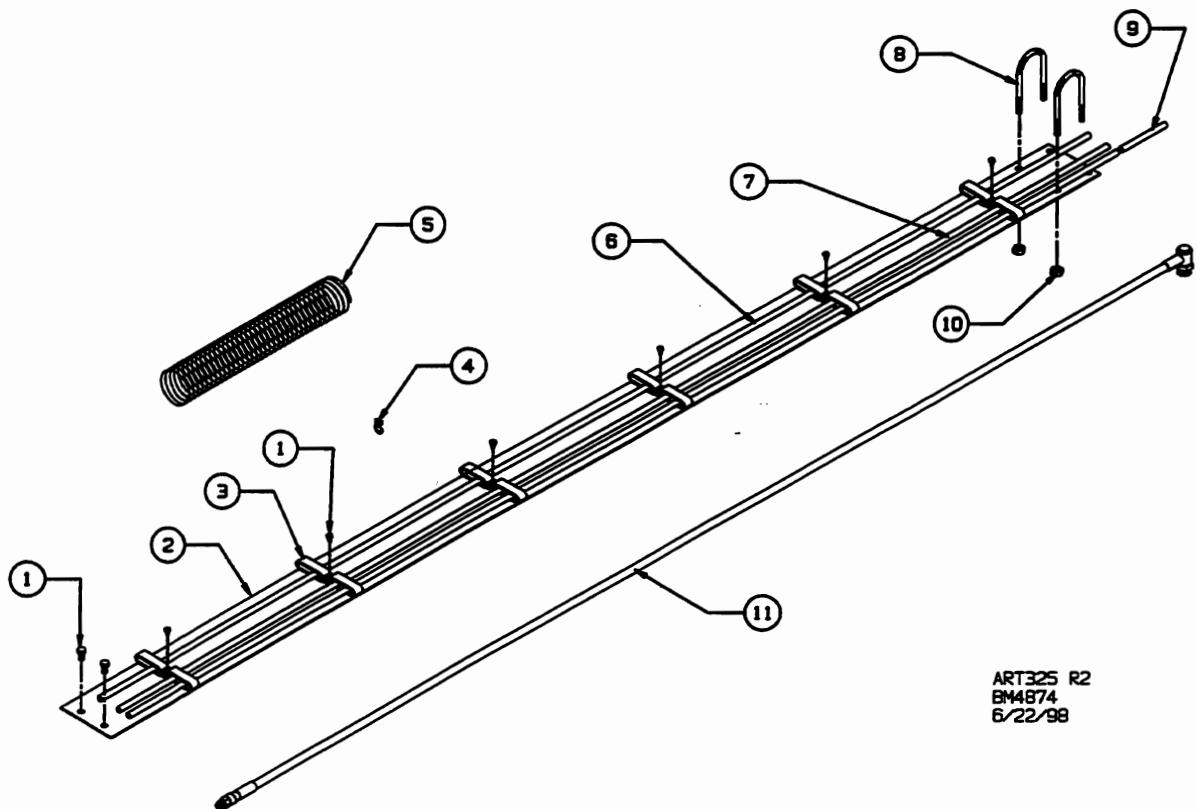
**Figure 5D - Lift Cylinder Assembly**

ITEM	PART NO.	QTY.	DESCRIPTION
1	6669	4	BEARING, 320U32
2	7440	1	BEARING, 320U24
3	7466	1	HOSE ASSEMBLY - LIFT
	6675	SERV.	SEAL KIT
4	HDW6727	1	PIPE FITTING, 90 DEG ELBOW, MALE 31, MALE 25
5	7788	2	HOSE CLAMP
6	10520	1	EMERGENCY DOWN ASSEMBLY
	2170	1	PULL HANDLE
	2171	1	EMERGENCY DOWN CONNECTOR
	4056	1	STOP SLEEVE
	4623	1	EMERGENCY DOWN BRACKET WELDMENT
	7516	1	EMERGENCY DOWN TUBE
	7517	1	EMERGENCY DOWN CABLE
7	HDW6455	3	SCREW, 1/4"-20 X 1/2", GRADE 5
8	7038	3	CLAMP, EMERGENCY DOWN TUBE
9	5435	1	MANUAL PULL VALVE
10	6973	1	VALVE, N.C. POPPET, 2-WAY
	6870	1	COIL 12 V 1 SPADE ASY W/DIODE
11	8335	2	CYLINDER PIN
12	10015	1	CYLINDER PIN LOCK PLATE
13	HDW5723	2	SCREW, 1/4"-20 X 3/4"
14	7576	1	REPAIR KIT - LIFT CYLINDER
15	8139	1	LIFT CYLINDER - 4" BORE
	7519	1	WIRE HARNESS - DOWN (NOT SHOWN)
	6458*	18	FT RETURN HOSE - EMERGENCY DOWN
		11	FT RETURN HOSE - CYLINDER VENT

\*ORDER 6458 HOSE IN 1 FT INCREMENTS

ART292 R3  
 BM4926  
 02/25/99

## Figure 5E - Hose Tray Assembly

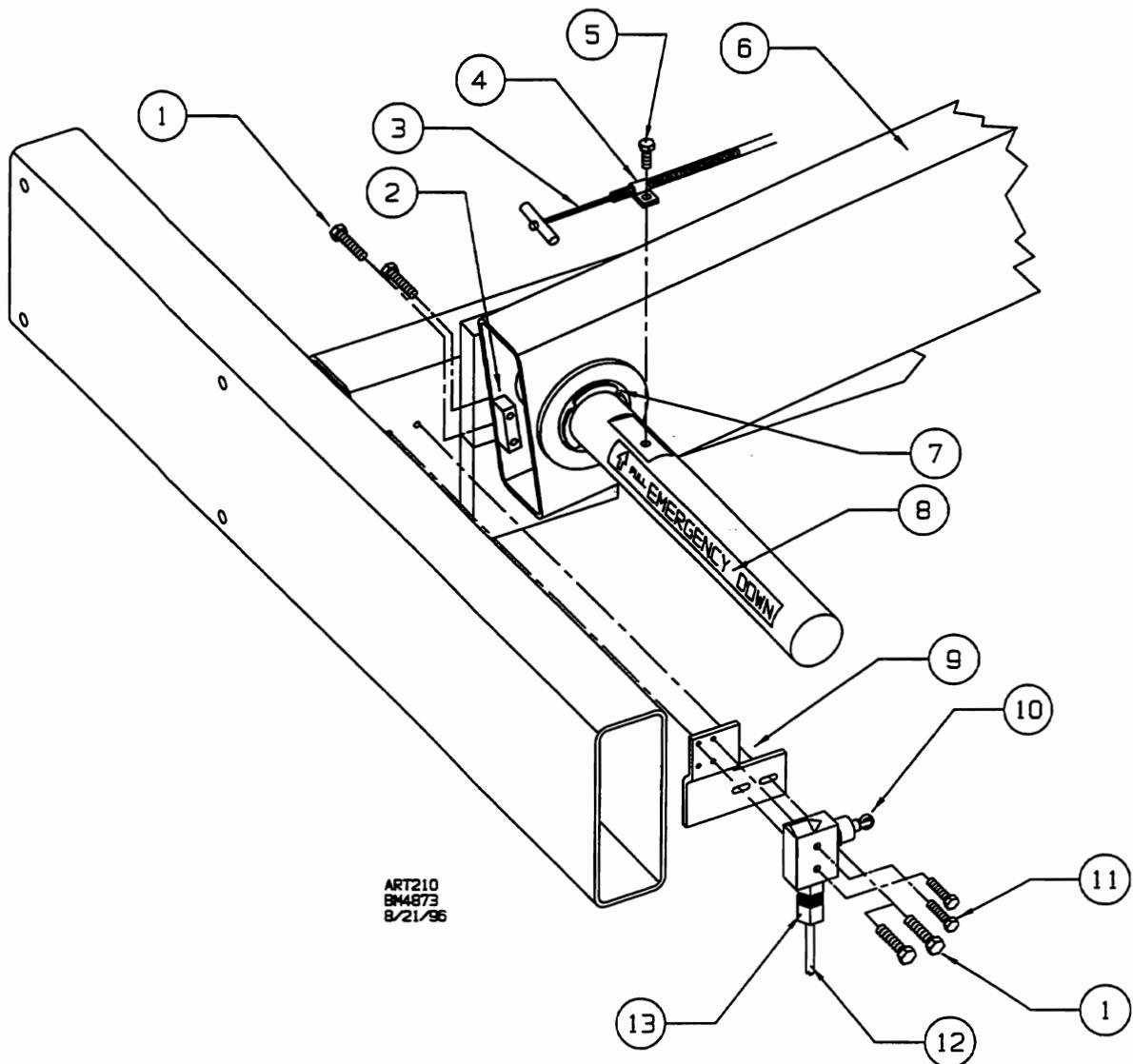


ART325 R2  
EM4874  
6/22/98

## Figure 5E - Hose Tray Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	HDW5723	8	BTSTFHEX .250 200 .75ZSTLY
2	10475	1	GUIDE, CYLINDER LIFT HOSE
3	7041	12	CABLE CLAMP, DBL TUBE W/VINYL
4	7164	4	HOSE CLAMP 5/16 I.D. HOSE
5	7510	4	SPRING, WIRE PROTECTOR
6	7519	1	DOWN - WIRE HARNESS
7	6458	11FT	RETURN LINE HOSE
8	7515	2	U-BOLT 1/4-20 X 2 X 3/1/4
9	6458	18FT	RETURN LINE HOSE
10	HDW5276	2	NTHEX 0.250 20Z 5N
11	7466	1	HOSE TUBE LIFT

ART325 R2  
BM4874  
6/22/98

**Figure 5F - Emergency Down & 10ft. Limit Switch**

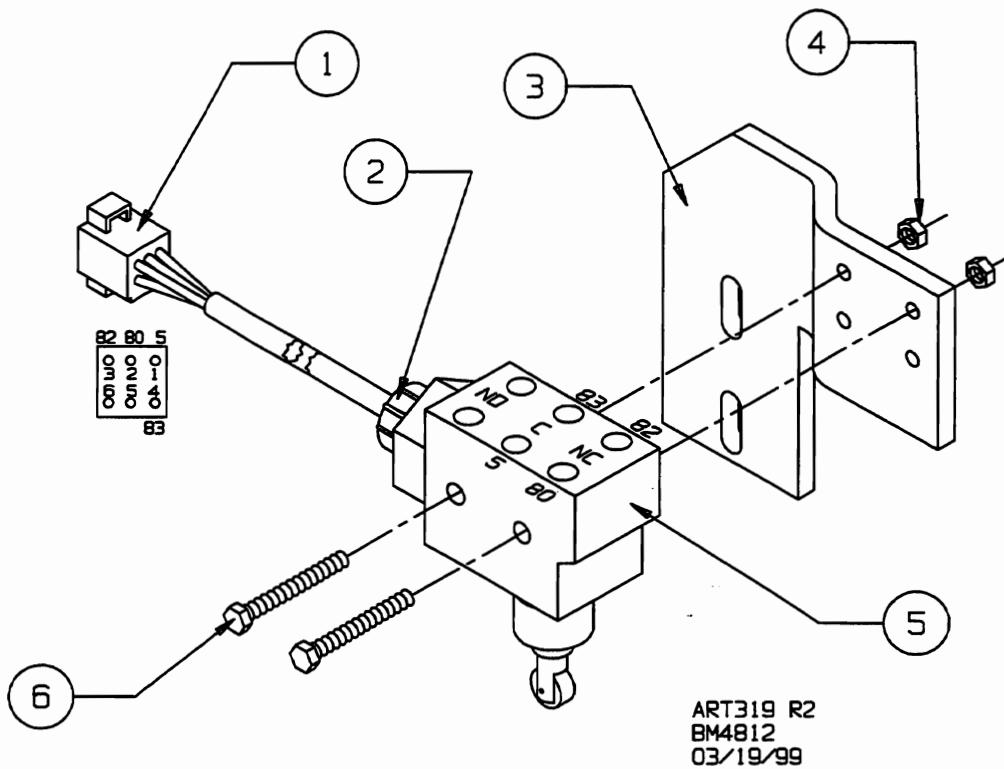
**Figure 5F - Emergency Down & 10ft. Limit Switch**

ITEM	PART NO.	QTY.	DESCRIPTION
1	HDW5723	4	SCREW, 1/4"-20 X 3/4"
2	10504	1	LIMIT BLOCK - BEAM
3	10520	1	EMERGENCY DOWN ASSEMBLY
4	7038	1	EMERGENCY DOWN TUBE CLAMP
5	HDW6455	1	SCREW, 1/4"-20 X 1/2", GRADE 5
6	10020	1	OUTER BEAM WELDMENT
7	6688	1	KLIPRING FOR 2" SHAFT
8	6557	1	EMERGENCY DOWN DECAL
9	10507	1	LIMIT SWITCH BRACKET
10	7488	1	LIMIT SWITCH
11	HDW7684	2	SCREW, #6-32 X 1 1/2"
12	7529	1	WIRE HARNESS
13	6456	1	STEEL CORD GRIP

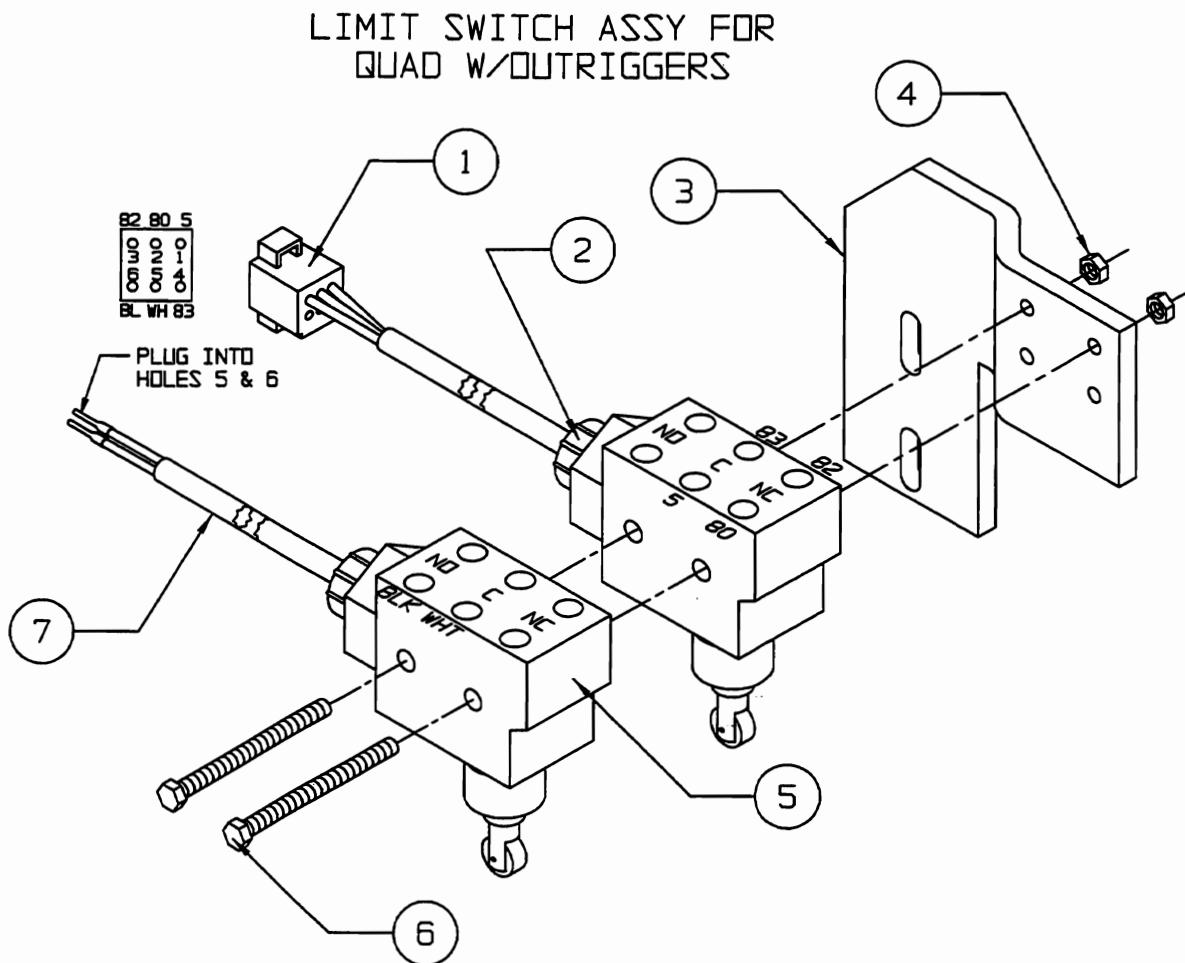
ART210  
BM4873  
8/21/96

**Figure 5G - Standard 10ft. Limit Switch**

10732 - LIMIT SWITCH ASSY.



ITEM	PART NO.	QTY.	DESCRIPTION
1	7529	1	WIRE HARNESS - TIP LIMIT SWITCH
2	6456	1	CORD GRIP - STEEL
3	10507	1	BRACKET - LIMIT SWITCH
4	HDW5364	2	NTHEXKEP #6 32Z 5N
5	7488	1	LIMIT SWITCH
6	HDW7684	2	BTMCHHEX #6 321.50ZSTLN

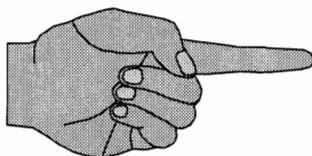
**Figure 5H - 10ft. Limit Switch W/Outrigger Option**

ITEM	PART NO.	QTY.	DESCRIPTION
1	7529	1	WIRE HARNESS - TIP LIMIT SWITCH
2	6456	2	STEEL CORD GRIP
3	10507	1	LIMIT SWITCH BRACKET
4	HDW5364	2	NUT, #6-32, GRADE 5
5	7488	2	LIMIT SWITCH
6	HDW8505	2	SCREW, #6-32 X 2 1/2"
7	8506	1	WIRE HARNESS - LIMIT OUTRIGGER

ART419 R2  
BM5996  
8/21/96



# Notes:

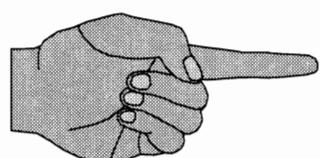


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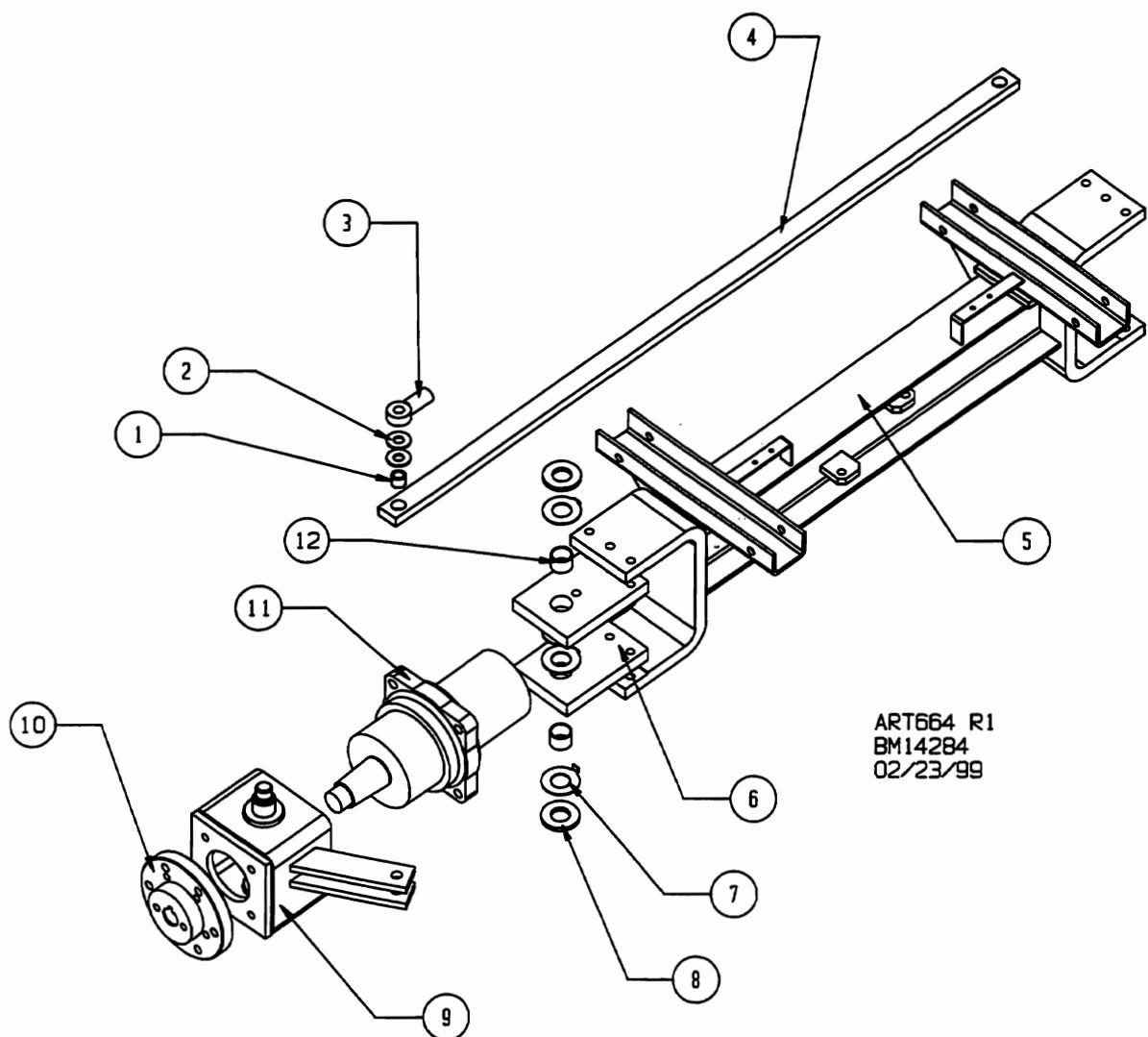
## Axes



# Notes:



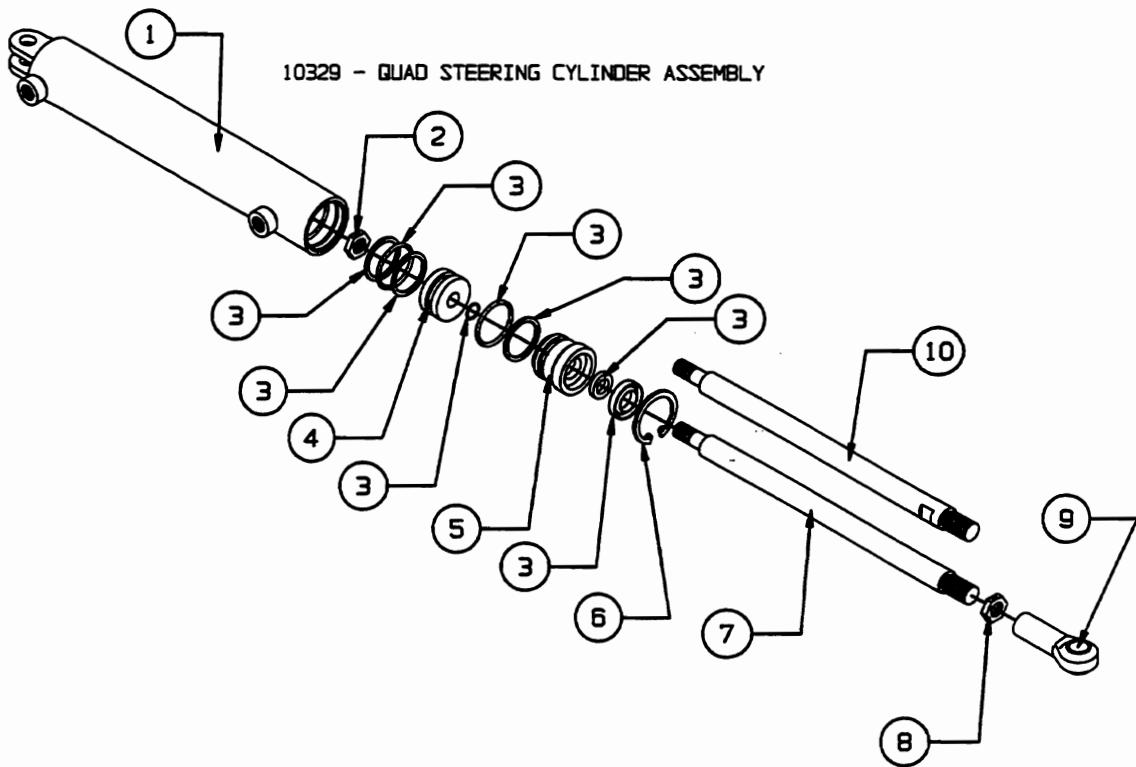
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**Figure 6A - Front Axle Assembly**

## Figure 6A - Front Axle Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	7292	2	BEARING - SLEEVE BRONZE
2	HDW5785	2	WRFLFAT 0.6871.5000.109STZNN
3	7293	1	ROD END BALL JOINT
4	10099	1	STEERING ARM
5	10315	1	FRONT AXLE WELDMENT
6	10245	4	PIVOT PLATE - FRONT AXLE
	HDW5215	12	BTCAPHXFLS .500 131.75Z 52N
7	10277	8	BEARING FRONT AXLE - 4WD
8	HDW10276	4	WRFLAT 1.252.5000.250STCNY
9	10328	1	MOTOR MOUNT WELDMENT - L.H.
	10327	1	MOTOR MOUNT WELD. R.H.
10	10709	1	REAR HUB
	HDW6676	SERV.	BTLUG .500 201.42ZSTLY
	HDW7961	6	NTHEXLLUGO .500 20Z 5Y
11	7300P	2	HYD. WHEEL MOTOR 45 3/IN
	HDW6435	8	BTCAPHEX .500 132.50Z 5N
	HDW8457	8	NTLOCTDPO .500 13Z BN
	7578	SERV.	REPAIR KIT, WHITE D.T. SERIES
12	5874	4	BEARING 20 DU16 1.25X1.437X1

ART664 R1  
BM14284  
02/23/99

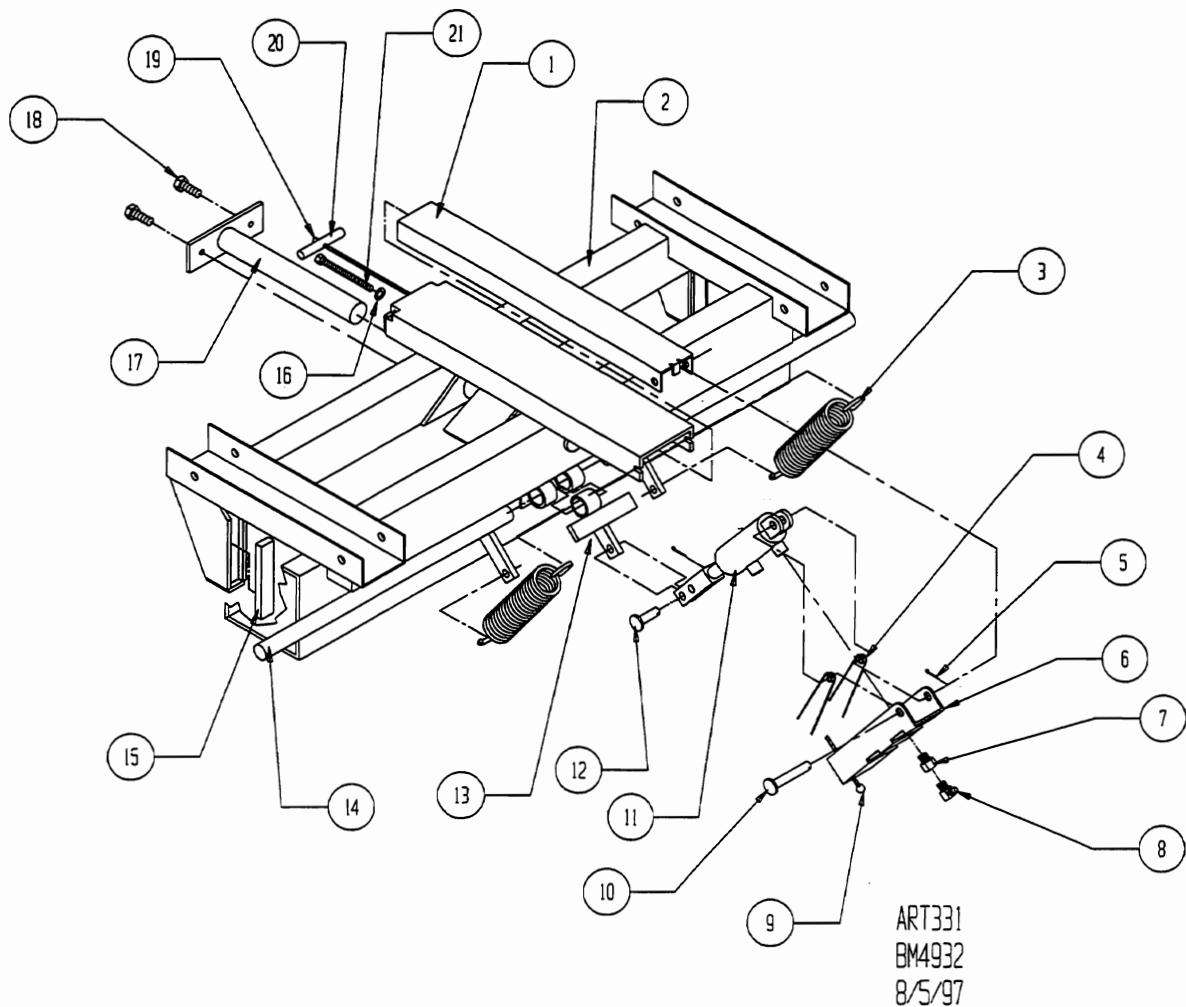
**Figure 6B - Steering Cylinder Assembly**ART344R3  
BMS045

## Figure 6B - Steering Cylinder Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	10048	1	CYLINDER WELDMENT - STEERING
2	6338	1	NTLOCTOPO.500 20Z BN
3	5947	1	SEAL KIT FOR 5677 & 5678
4	2494	1	PISTON CYLINDER
5	2493	1	CYLINDER HEAD
6	6337	1	INTERNAL RET. RING
7	10041	1	CYLINDER ROD
8	5925	1	NUT
9	7293	1	ROD END BALL JOINT
10			CYLINDER ROD (NOT USED)

ART344R3  
BM5045

## Figure 6C - Rear Axle Mount Assembly



## Figure 6C - Rear Axle Mount Assembly

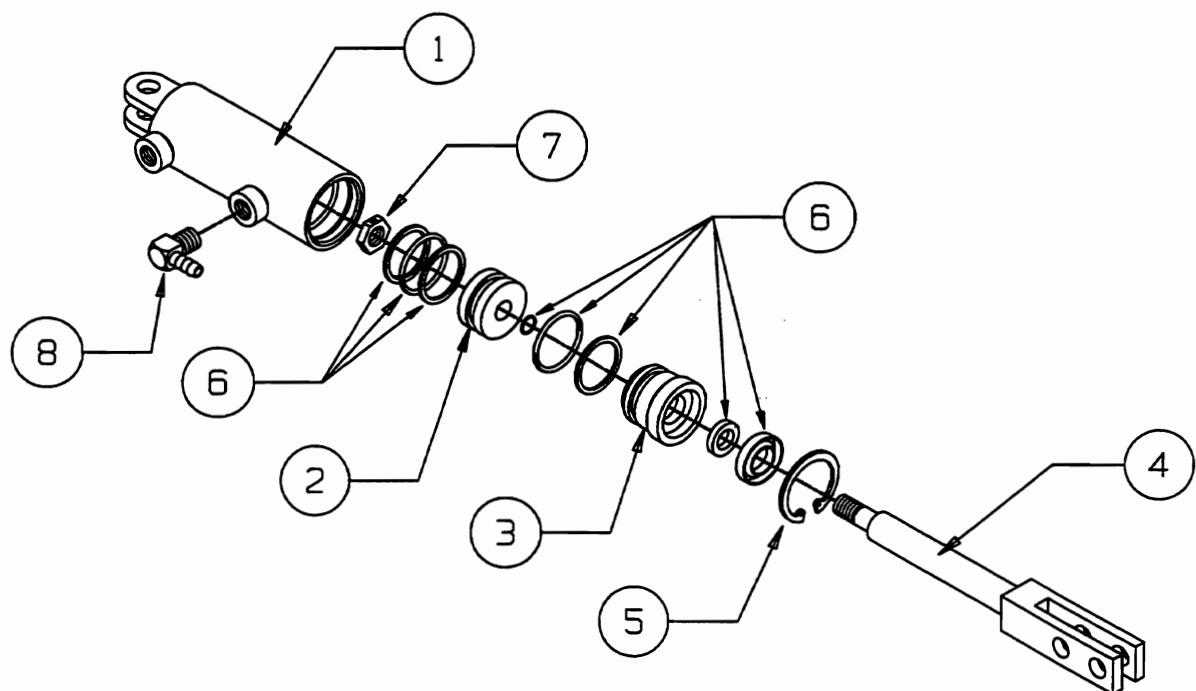
ITEM	PART NO.	QTY.	DESCRIPTION
1	10426	1	BRAKE CHANNEL WELDMENT
2	10283	1	REAR AXLE BASE WELDMENT
3	7355P	2	BRAKE SPRING
4	7820	2	TORSION SPRING - BRAKE LOCK
5	HDW5920	2	COTTER PIN, HAMMERLOC, 1/8" X 1"
6	10428	1	BRACKET BRAKE CYLINDER WELDMENT
7	HDW6343	1	PIPE FITTING, MALE 1/4", FEMALE 1/4"
8	HDW6727	1	PIPE FITTING, 90° ELBOW, MALE 31, MALE 25.
9	7518	1	BRAKE RELEASE CABLE ASSEMBLY
10	HDW7396	1	CLEVIS PIN - 1/2" X 3"
11	2483	1	BRAKE CYLINDER ASSEMBLY
	2485	1	BRAKE CYLINDER WELDMENT
	2493	1	CYLINDER HEAD
	2494	1	CYLINDER PISTON
	2504	1	BRAKE CYLINDER ROD
	5947	1	SEAL KIT FOR BRAKE CYLINDER
	6337	1	INTERNAL RETAINING RING
	HDW6338	1	LOC NUT, 1/2"-20
12	HDW5710	1	CLEVIS PIN - 1/2" X 1 1/4"
13	3103	1	INNER BRAKE ACTUATOR
14	10450	1	BRAKE ROD WELDMENT - RT
	10806	1	BRAKE ROD WELDMENT - ELEC. & SRT
15	10424	2	NYLON AXLE GUIDE
16	HDW5355	1	FLAT WASHER, 7/16" ID, 1" OD
17	10423	1	PIVOT PIN WELDMENT
18	HDW5204	2	SCREW, 5/16"-18 X 1", GRADE 5
19	4056	1	STOP SLEEVE
20	2170	1	PULL HANDLE
21	HDW7400	1	SCREW, 3/8-16 X 4", GRADE 5.

ART331

BM4932

8/5/97

## Figure 6D - Brake Cylinder Assembly



ART164 R3  
BM5043  
07/07/97

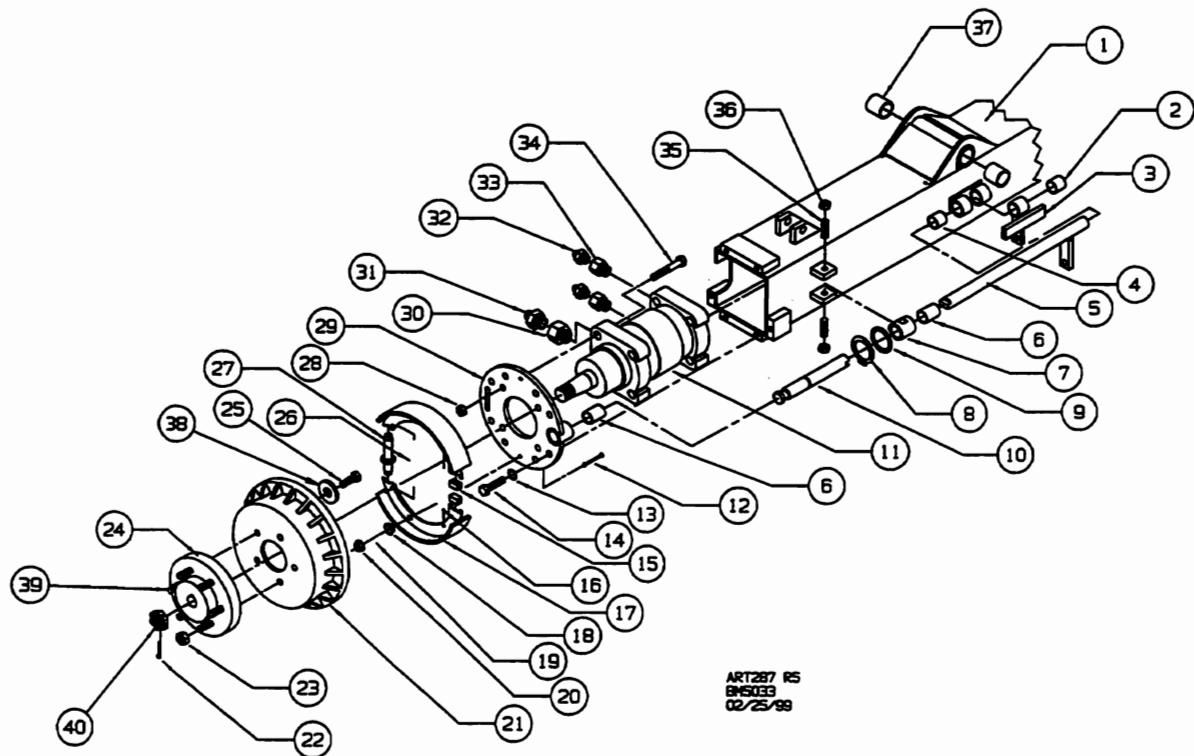


## Figure 6D - Brake Cylinder Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
	2483	1	BRAKE CYLINDER ASSEMBLY
1	2485	1	CYLINDER, BRAKE
2	2494	1	PISTON
3	2493	1	HEAD
4	2504	1	ROD, BRAKE CYLINDER, W/BEARING
5	6337	1	RING, RETAINING, INTERNAL
6	5947	1	SEAL KIT
7	HDW6338	1	NUT, HEX LOCK, 2-WAY, 1/2-20, GRADE B
8	HDW6727	1	ELBOW, 90 DEG. BAYONET, 5/16

ART164 R3  
BM5043  
07/07/97

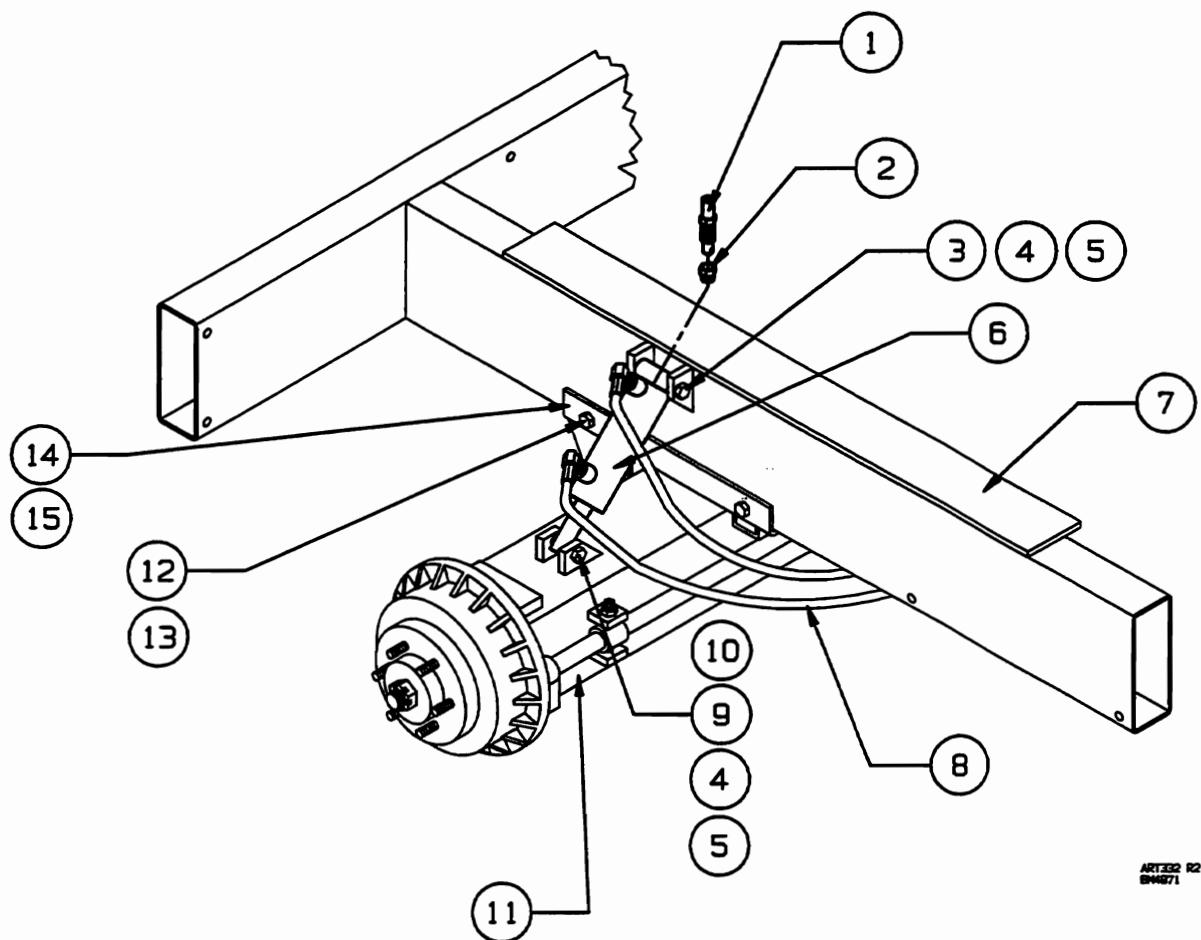
## Figure 6E - Rear Axle Assembly



## Figure 6E - Rear Axle Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	10270	1	REAR AXLE WELDMENT-RT MODELS
	10808	1	REAR AXLE WELDMENT-ELEC. & SRT MODELS
2	3648	1	BRAKE ROD BEARING
3	3103	1	INNER BRAKE ACTUATOR
4	5866	2	BEARING
5	10806	2	BRAKE ROD WELDMENT-ELEC. & SRT MODELS
	10450	2	BRAKE ROD WELDMENT-RT MODELS
6	5912	4	BEARING, CAM, 16DU24
7	10445	2	BRAKE BUSHING
8	5918	2	RETAINING RING, HEAVY DUTY-1"
9	HDW5901	2	FLAT WASHER, 1 3/8" OD
10	10096	2	BRAKE CAM
11	7300P	2	HYDRAULIC WHEEL MOTOR-PAINTED
12	7371	4	HOLD DOWN PIN
13	HDW5875	12	LOCK WASHER 1/2", INTERNAL TOOTH LOCK
14	HDW6211	12	SCREW, 1/2-13 X 1 1/4", GRADE 5
15	10090	4	BRAKE INSERT
16	6749	2	EXTENSION SPRING, 4" LONG
17	10093	4	BRAKE PAD WELDMENT
18	7373	4	CUP, HOLD DOWN, INNER
19	7374	4	SPRING HOLD DOWN
20	7372	4	CUP, HOLD DOWN, OUTER
21	10856	2	BRAKE DRUM, 11 3/8" OD
22	HDW5290	2	COTTER PIN, EXTERNAL PRONG, .156 DIA., 1 3/4" LONG
23	HDW7961	12	LUG NUT, 1/2-20, GRADE 5, FOR 90 DEG CHAMFER
24	10709	2	REAR HUB ASSEMBLY
25	HDW7990	10	SCREW, 1/2-13 X 1 1/4", GRADE 8
26	7370	2	BRAKE ADJUSTER SPRING
27	7377	2	ADJUSTING SCREW, BRAKE
28	HDW8457	8	NUT, 1/2-13, GRADE B
29	10097	2	BRAKE PLATE WELDMENT
30	HDW7387	2	ADAPTOR PIPE FITTING, MALE 5/8" O-RING, FEMALE 1/2" O-RING
31	HDW7389	2	ADAPTOR, PIPE FITTING, MALE .37 SIZE .37 DEG FLARE, MALE 1/2" O-RING
32	HDW7388	4	ADAPTOR PIPE FITTING, 45 DEG ELBOW, MALE 1/2", 37 DEG FLARE, MALE 5/8" O-RING
33	HDW7386	4	ADAPTOR PIPE FITTING, MALE 3/4" O-RING, FEMALE 5/8" O-RING
34	HDW6435	8	SCREW, 1/2-13 X 2 1/2"
35	HDW6247	4	SET SCREW, FLAT POINT, 1/2-13 X 1 1/2", GRADE 8
36	HDW6248	4	NUT, 1/2-13, GRADE 5
37	7196	2	BEARING - 22DU28, 1 3/8" ID X 1 3/4"
38	8992	10	WRFLAT 0.525X1.375X0.188ST NYN
39	6676	SERV.	BTLUG .500 201.42ZSTLY
40	8568	SERV.	NTSLOTTED1.125 18NSTLN

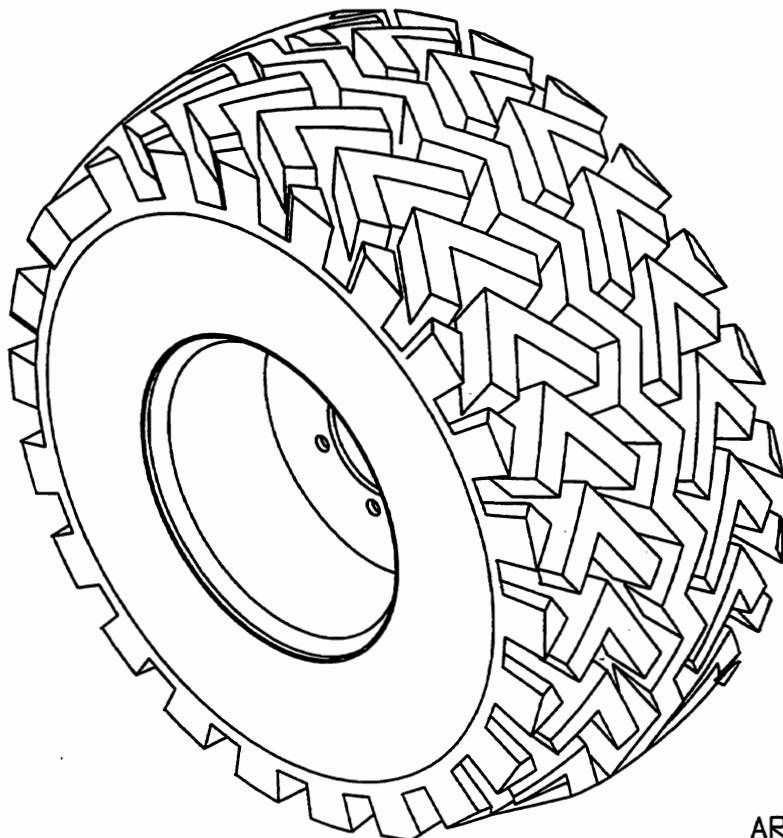
ART287 RS  
BM5033  
02/25/99

**Figure 6F - Axle Locking Cylinder Assembly**

## Figure 6F - Axle Locking Cylinder Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	10852	2	BLEEDER
2	10853	2	PFADAPT MO.12NPT F0.25 UNC BNY
3	10355	2	CYLINDER PIN - UPPER
4	6633	4	NTFLXLOCO.625 112 5N
5	5432	4	GREASE FITTING
6	7147	2	CYLINDER - AXLE LOCKING
	7574	SERV	SEAL KIT
7	10012	1	BASE WELDMENT - ATV
8	7381	4	HOSE , AXLE CYLINDER
9	10354	2	CYLINDER PIN - LOWER
10	5785	2	WRFLAT 0.6871.5000.109STZNN
11	10270	1	AXLE - REAR WELDMENT
12	6463	4	NTLOCNYLO.500 13Z 5N
13	7312	4	BTCAPHEX .500 134.50Z 5N
14	10424	2	AXLE GUIDE - NYLON - ATV
15	10283	1	REAR AXLE BASE WELDMENT

ART332 R2  
BM4971

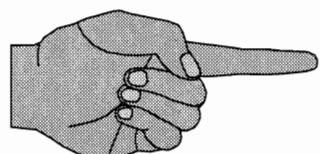
**Figure 6G - Tires**

ART750 R1  
BM16313  
02/24/99

QUAD RT

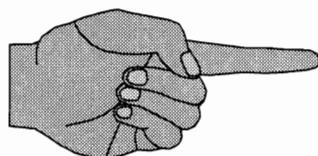
- 8134 RIM ONLY 13 X 15
- 7283 RIGHT HAND W/ PUNCTURE SEALANT \* 26 X 12 X 12
- 7290 LEFT HAND W/ PUNCTURE SEALANT \* 26 X 12 X 12
- 7301 RIGHT HAND W/ PUNCTURE SEALANT \* 31 X 15 X 15
- 7302 LEFT HAND W/ PUNCTURE SEALANT \* 31 X 15 X 15
- 8499 LEFT HAND 10 X 16.5 (SKID STEER TIRE)
- 8500 RIGHT HAND 10 X 16.5 (SKID STEER TIRE)

# Notes:



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# Notes:

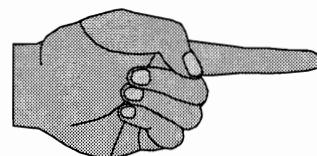


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## Hydraulics

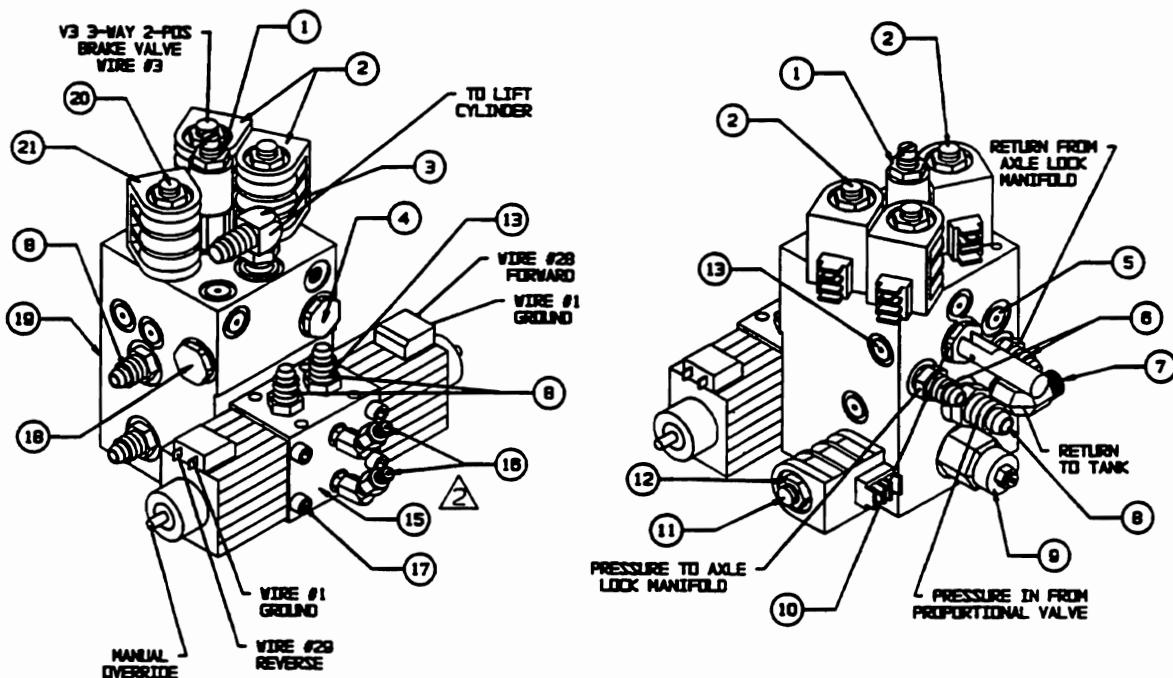


# Notes:



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## Figure 7A - Lift / Drive Manifold Assembly

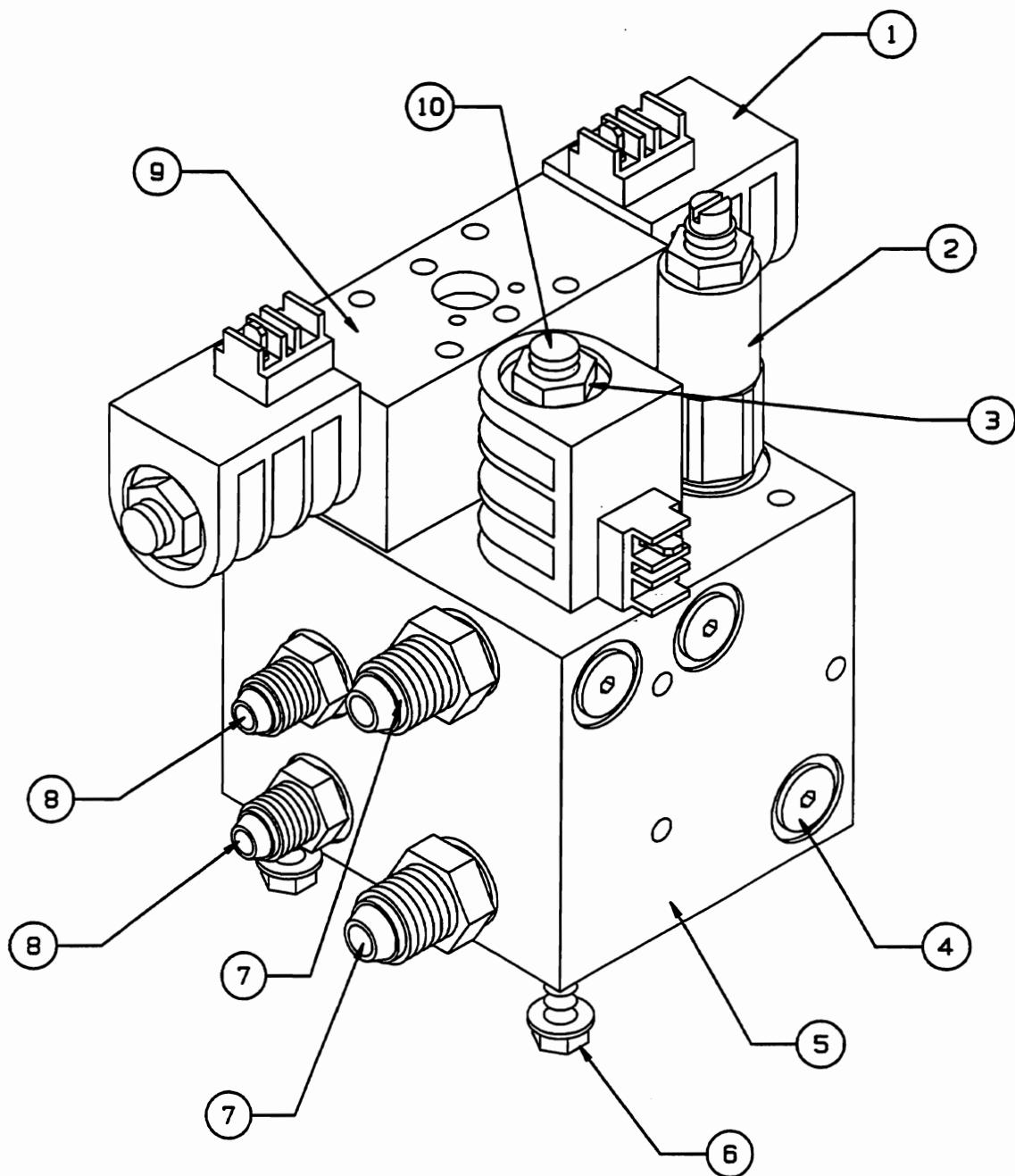


ART-043R1  
SH4234  
SCALE 1/3

**Figure 7A - Lift / Drive Manifold Assembly**

ITEM	PART NO.	QTY.	DESCRIPTION
1	6316	1	ADJ. RELIEF VALVE
2	6973	2	VALVE N.C. POPPET 2 WAY
3	HDW7385	1	PFELB90 MØ.50JICMØ.500RNGSZN
4	5434	1	VALVE, CHECK - IN LINE
5	10708	1	METERING PLUG - ELECTRIC
	7484	1	PLUG - O RING SOCKET HEAD
6	HDW7438	2	PFADAPT MØ.37JIC MØ.560RNGSYN
7	HDW7524	1	PFELD90 MØ.75SAE MØ.50NPT BNN
8	HDW7390	1	PFUNION MØ.50JIC MØ.500RNGSZN
9	7311	1	COUNTER BALANCE VALVE
10	7491	1	VALVE MANUAL RELEASE
11	6974	1	VALVE NO POPPET 2/W
12	6983	1	VALVE NUT
13	HDW7314	10	PFPLUG M 430RNG SYN
15	7288	1	4 WAY VALVE, DIRECTIONAL
	7568	SERV	COIL, WATERMAN 4 WAY
16	8213	2	FITTING, QUICK DISCONNECT MALE
	8214	2	FITTING ADAPTER
	9006	OPTL	45° FITTING (GENERATOR OPTION)
19	10496	1	MANIFOLD - DIRECT/LIFT LOWER
18	10915	1	PLUG
19	10496	1	MANIFOLD - DIRECT/LIFT LOWER
20	6976	1	VALVE 3 WAY 2 POS.
21	6870	4	12V COIL

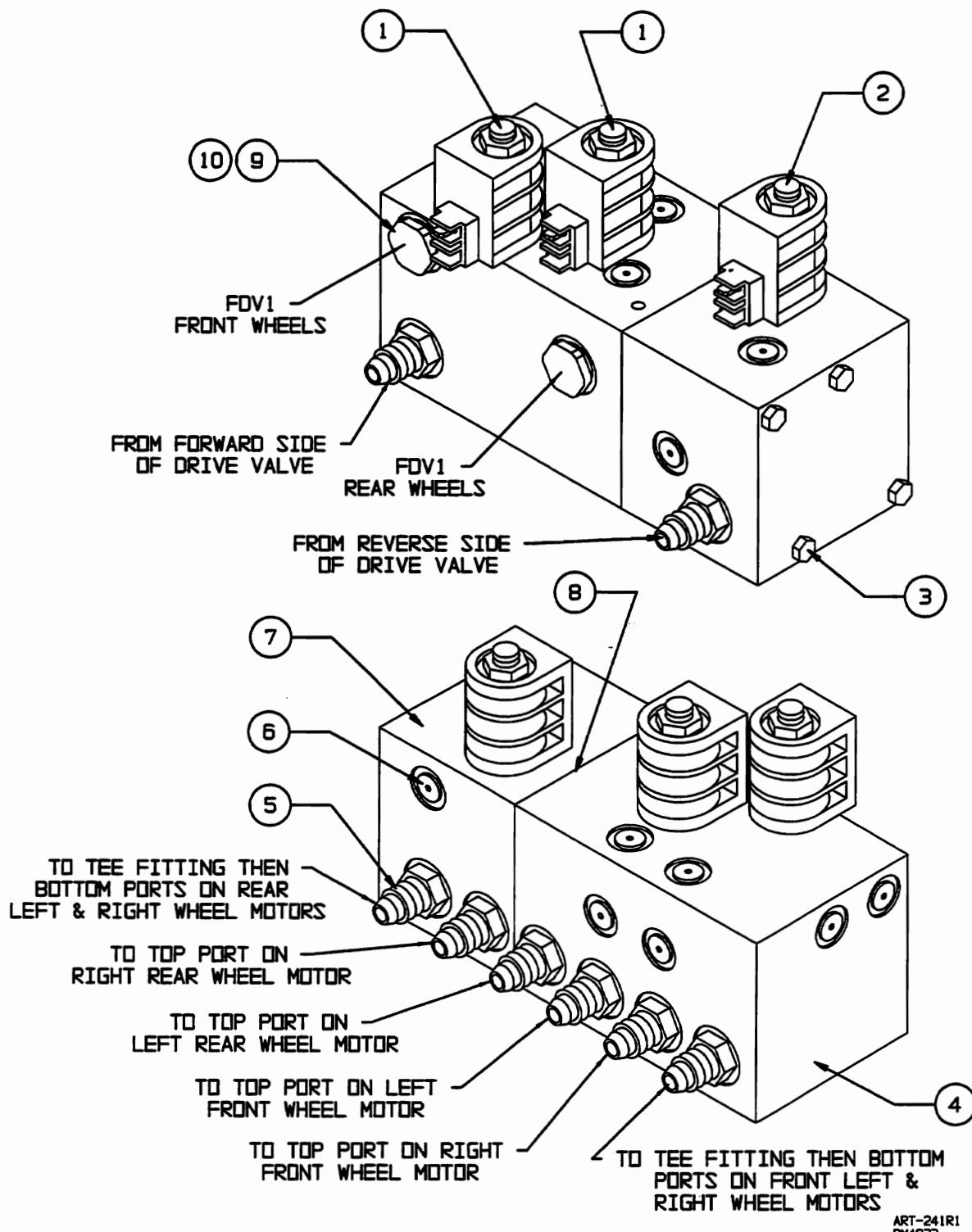
ART-243R1  
BM4834  
SCALE 1/3

**Figure 7B - Steering Manifold Assembly****STEERING MANIFOLD - QUADREX**ART-213 R2  
BM4632

## Figure 7B - Steering Manifold Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	6870	2	COIL 12V 1 SPADE ASY. W/DIODE
2	6316	1	ADJ RELIEF VALVE
3	6983	3	VALVE NUT
4	7314	6	PFPLUG M 430RNG
5	10201	1	MANIFOLD - STEERING & OPTIONS
6	5723	3	BTSTFHEX .250 200.75ZSTLY
7	7489	2	PFADAPT MO. 50JIC 370RNGSZN
8	7438	2	PFADAPT MO. 37JIC 560RNGSZN
9	7977	1	VALVE 4 WAY, 3 POS. CLOSED CNTR
	6161	SERV	SPRING AND O-RING KIT
10	6974	3	VALVE NO POPPET 2 WAY

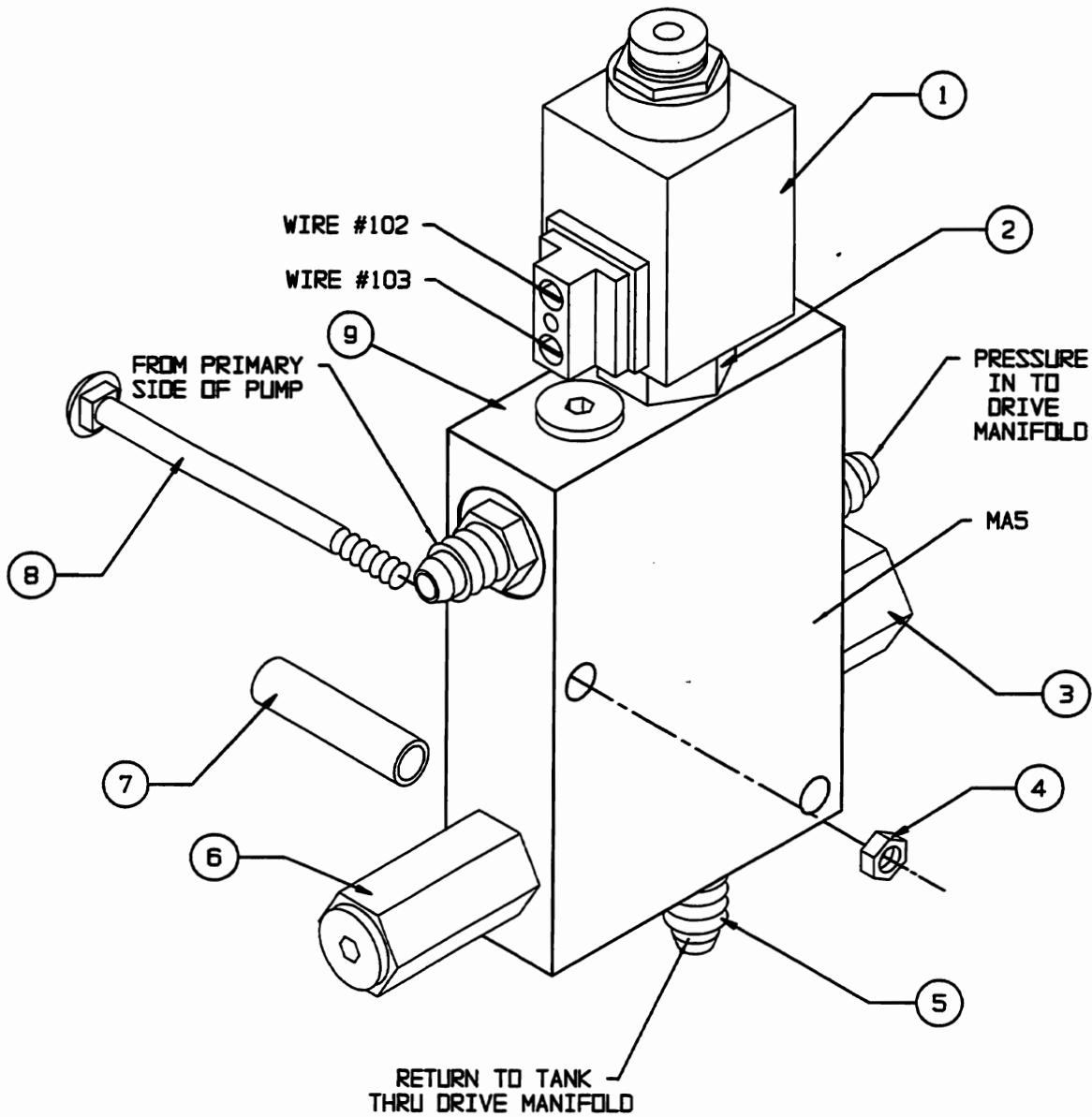
ART-313 R2  
BH4632

**Figure 7C - Flow / Divide Manifold Assembly**

**Figure 7C - Flow / Divide Manifold Assembly**

ITEM	PART NO.	QTY.	DESCRIPTION
1	6976	2	VALVE 3 WAY 2 POSITION
2	6975	1	VALVE N.O. SP00L 2 WAY
	10521	1	METERING PLUG
3	HDW7359	4	BTCAPHEX .312 184.00Z 5N
4	10360	1	MANIFOLD-FLOW DIVIDE/COMBINE
5	HDW7390	8	PFUNION M0.50JICM0.500RNGSZN
6	7314	14	PFPLUG M 430RNG
7	10361	1	MANIFOLD - DECEL
8	7444	3	"O" RING - MANIFOLD
9	7303	2	FLOW DIVIDER 6-3
10	7567	SERV	SEAL KIT

ART-241R1  
8M48G3

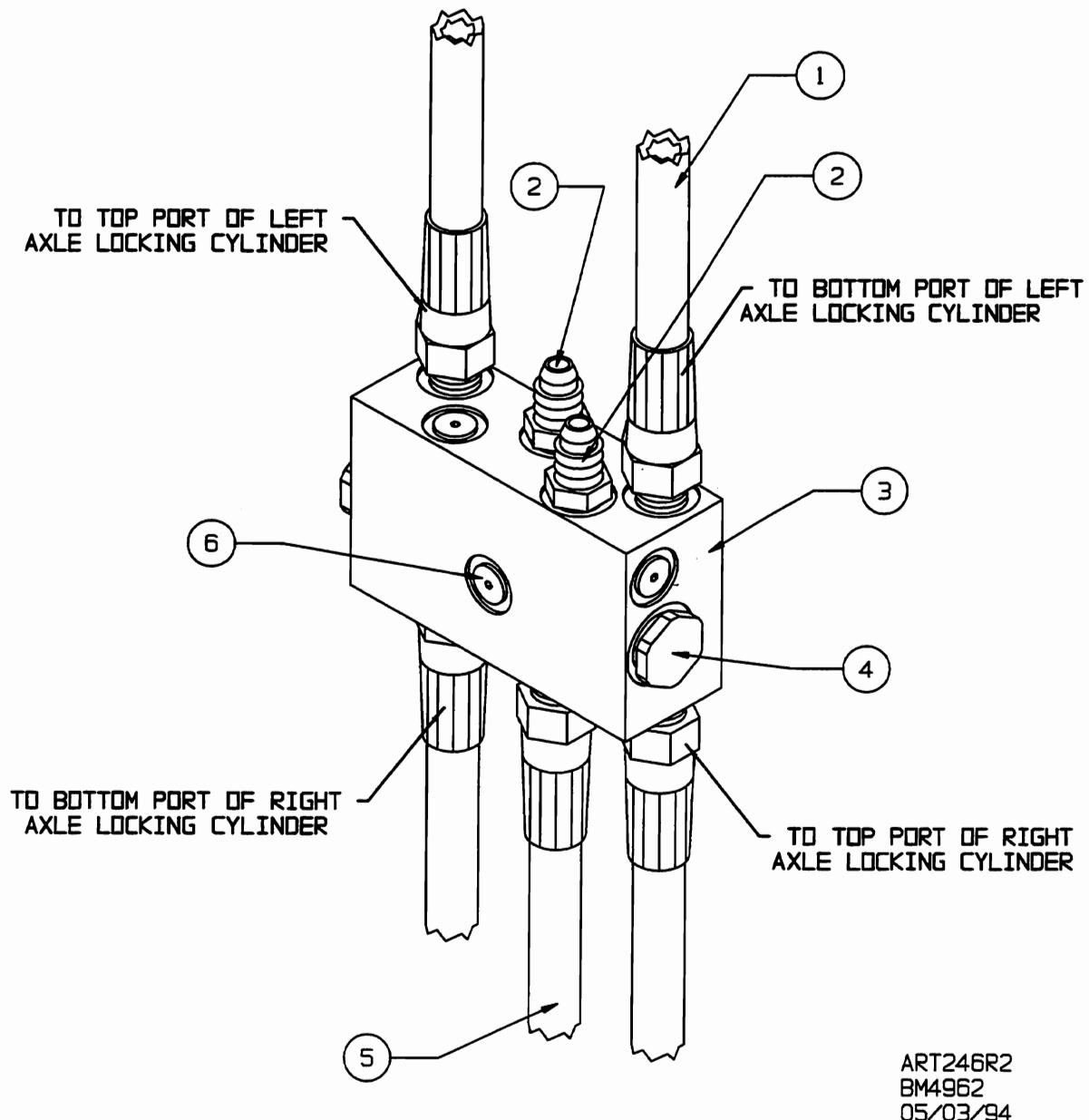
**Figure 7D - Proportional Valve Assembly**

ART-244R1  
BH14227  
SCALE 1/1.5

## Figure 7D - Proportional Valve Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	7570	SERV	COIL, COMPACT PROPORTIONAL
2	8786	SERV	CARTRIDGE WITH/COIL
3	9015	SERV	DIFFERENTIAL SENSING
4	HDW5005	2	NTHEKEPO.312 18Z 5N
5	HDW7390	3	PFLUNION MO.50JIC MO.500RNGSZN
6	9016	1	RELIEF VALVE
7	4551	2	SPACER
8	HDW7407	2	BTCAPRNDSQ .312 184.50Z 2N
9	7289	1	PROPORTIONAL VALVE MAIN

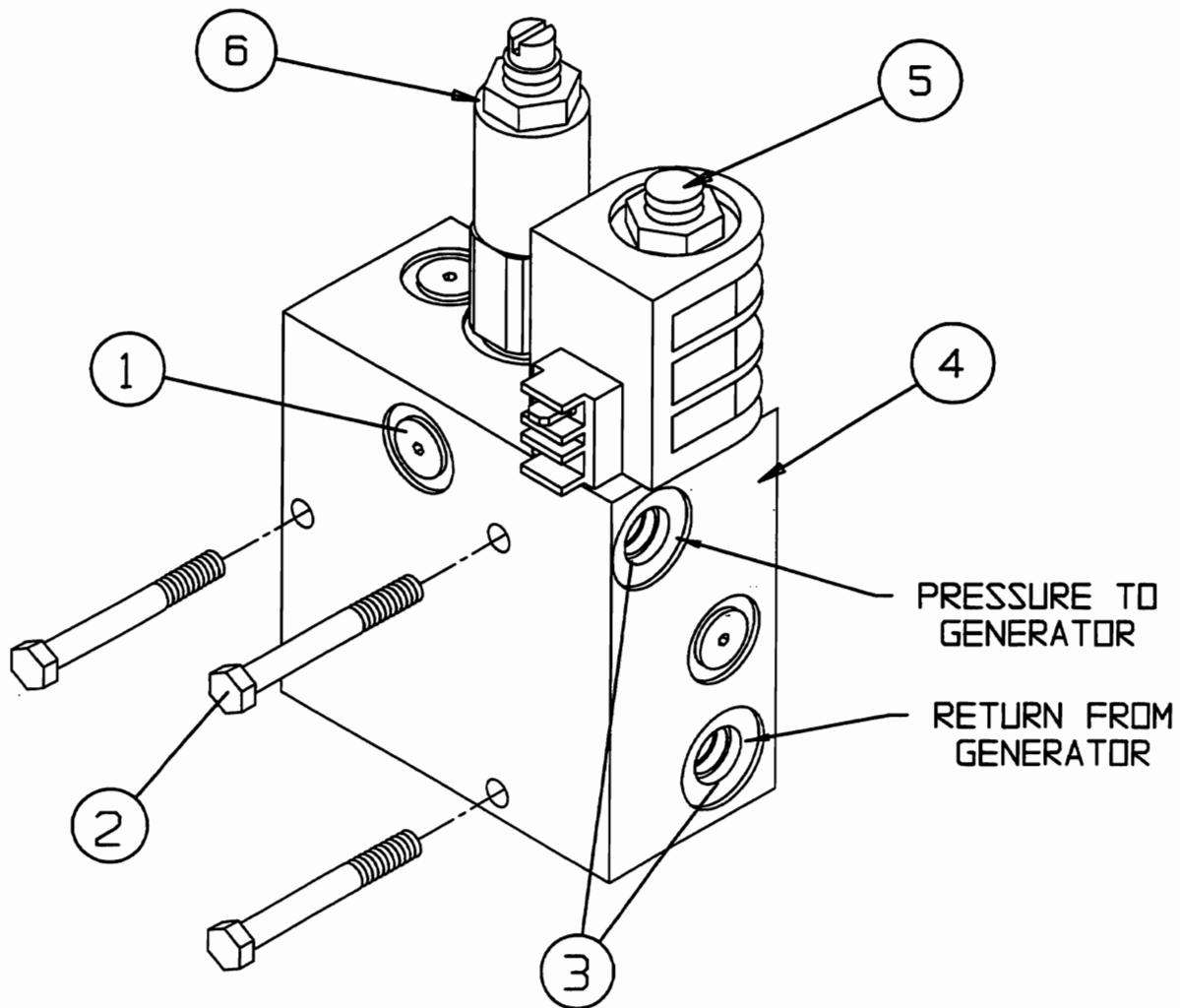
ART-244R1  
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SCALE 1/1.5

**Figure 7E - Axle Cylinder Manifold**

## Figure 7E - Axle Cylinder Manifold

ITEM	PART NO.	QTY.	DESCRIPTION
1	7381	4	HOSE AXLE CYLINDER
2	7438	2	PFADAPT MO. 37JIC MO. 560RNGSYN
3	10278	1	MANIFOLD AXLE CONTROL
4	7445	2	VALVE PILOT OPER. BALL CHECK
5	7478	1	BRAKE HOSE ASSEMBLY
6	7314	3	PFPLUG M 430RNG

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BM4962  
05/03/94

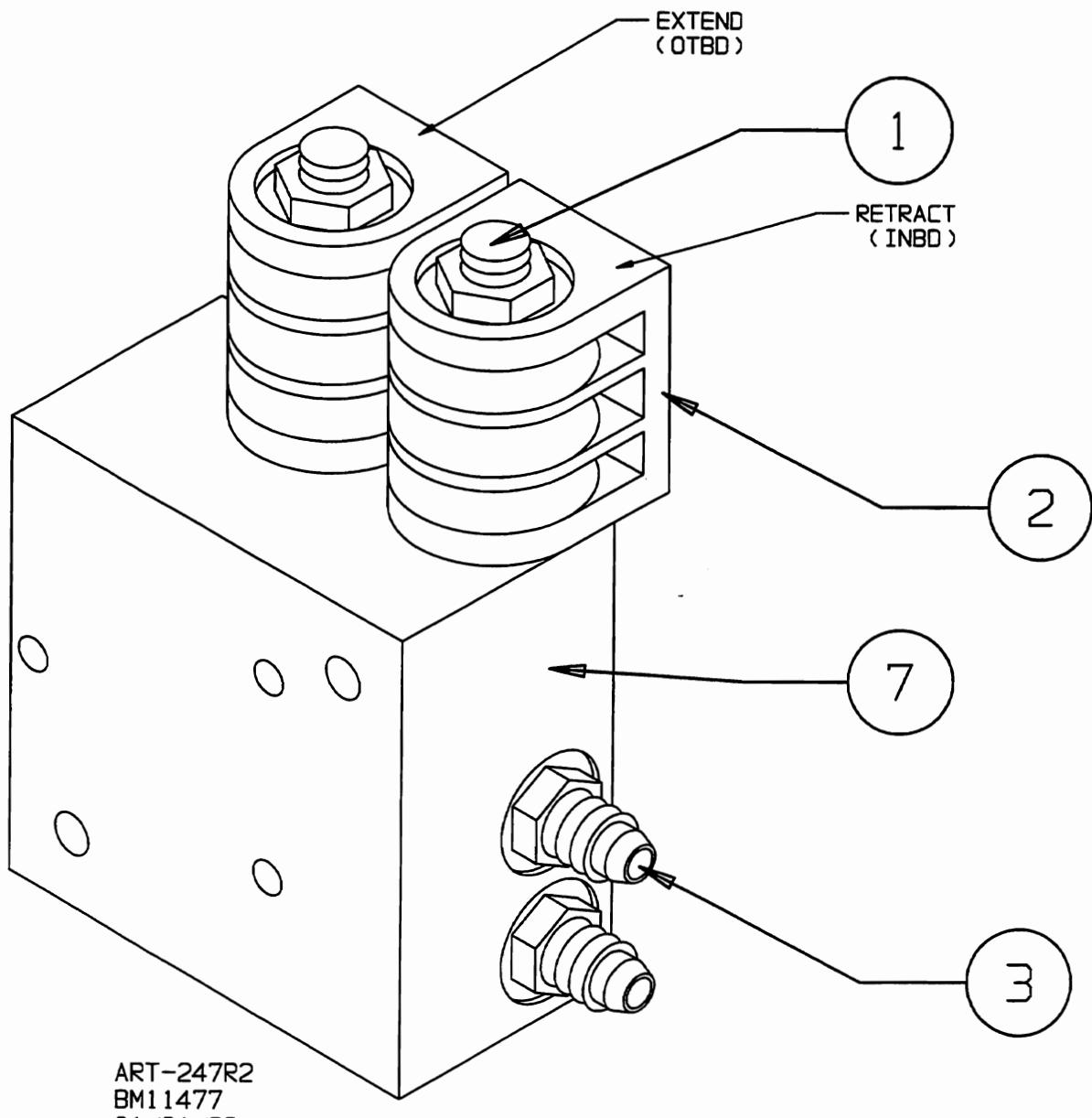
**Figure 7F - Generator Option Manifold**

ART-245R1  
SCALE 1/2

## Figure 7F - Generator Option Manifold

ITEM	PART NO.	QTY.	DESCRIPTION
1	HDW7314	3	PFPLUG M 430RNG
2	HDW6502	3	BTCAPHEX .250 202.50Z 5N
3	HDW7438	2	PFADAPT M0.37JICM0.560RNGSYN
4	10536	1	MANIFOLD
6	7560	1	PRIORITY FLOW CONTROL
5	6973	1	VALVE N.C. POPPET 2-WAY
	6870	1	12V COIL

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SCALE 1/2

**Figure 7G - Outrigger Option Manifold**

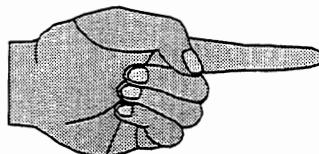
## Figure 7G - Outrigger Option Manifold

ITEM	PART NO.	QTY.	DESCRIPTION
1	6976	2	VALVE 3 WAY 2 POSITION
2	6870	2	COIL 12V 1 SPADE ASSY W/DIODE
3	HDW7438	2	PFADAPT MØ.37JIC MØ.560RNGSYN
4	HDW6502	3	BTCAPHEX .250 202.50Z 5N (NOT SHOWN)
5	7444	2	"O" RING, MANIFOLD (NOT SHOWN)
6	HDW7314	3	PFPLUG M 430RNG (NOT SHOWN)
7	10200	1	MANIFOLD

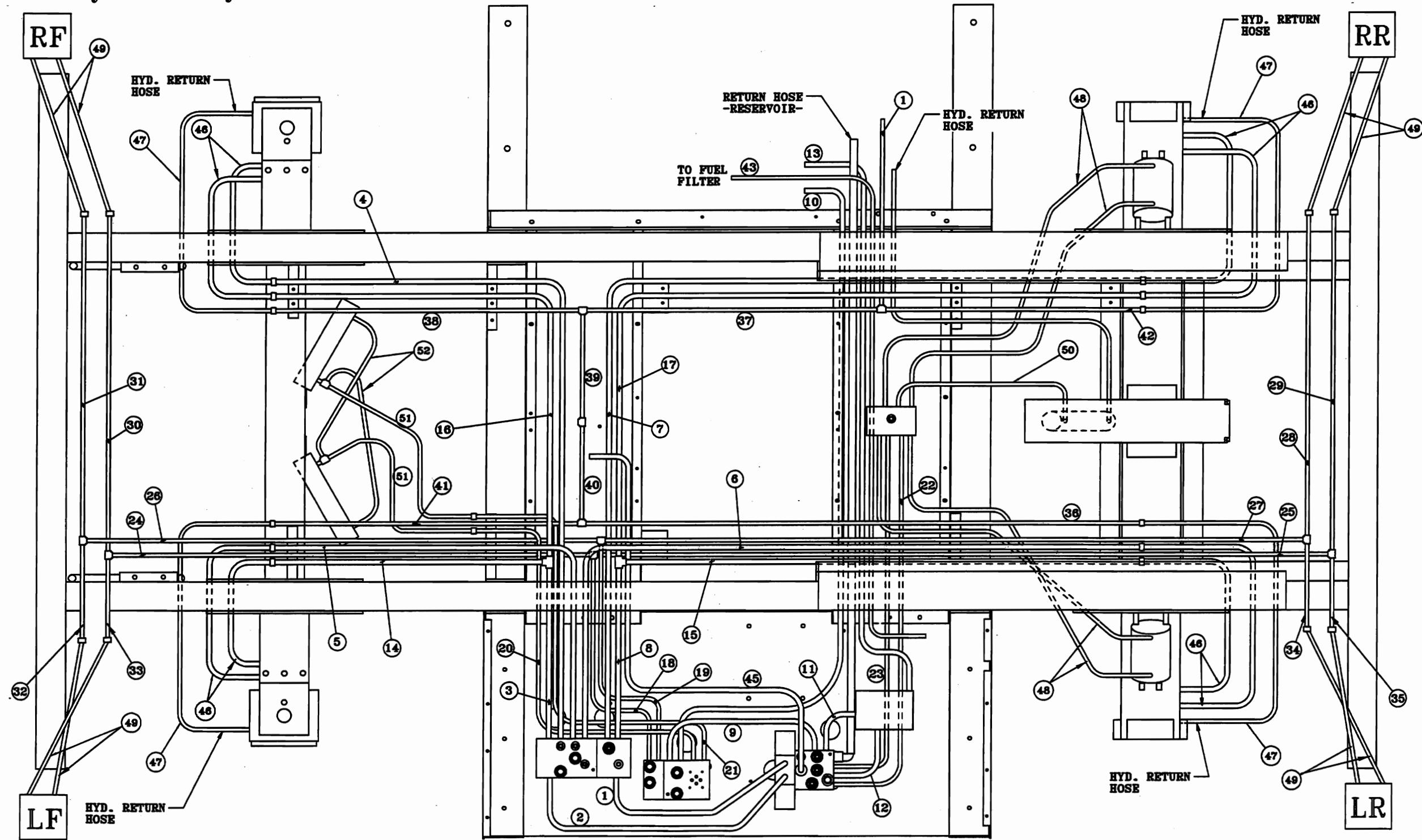
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**Figure 7H - Hydraulic Layout**

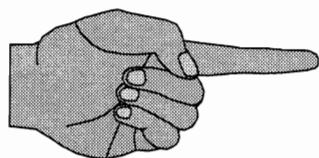
ART143 R2  
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SCALE = 1/11

## Figure 7H - Hydraulic Layout

ITEM	PART NO.	QTY.	DESCRIPTION
1	7331	1	#1 HYDRAULIC TUBE ASSEMBLY
2	7332	1	#2 HYDRAULIC TUBE ASSEMBLY
3	7333	1	#3/8 HYDRAULIC TUBE ASSEMBLY
4	7334	1	#4 HYDRAULIC TUBE ASSEMBLY
5	7335	1	#5 HYDRAULIC TUBE ASSEMBLY
6	7336	1	#6 HYDRAULIC TUBE ASSEMBLY
7	7337	1	#7 HYDRAULIC TUBE ASSEMBLY
8	7333	1	#3/8 HYDRAULIC TUBE ASSEMBLY
9	7338	1	#9 HYDRAULIC TUBE ASSEMBLY
10	7339	1	#10 HYDRAULIC TUBE ASSEMBLY
11	7340	1	#11 HYDRAULIC TUBE ASSEMBLY
12	7341	1	#12 HYDRAULIC TUBE ASSEMBLY
13	7342	1	#13 HYDRAULIC TUBE ASSEMBLY
14	7343	1	#14 HYDRAULIC TUBE ASSEMBLY
15	7344	1	#15 HYDRAULIC TUBE ASSEMBLY
16	7345	1	#16 HYDRAULIC TUBE ASSEMBLY
17	7346	1	#17 HYDRAULIC TUBE ASSEMBLY
18	7347	1	#18 HYDRAULIC TUBE ASSEMBLY
19	7348	1	#19 HYDRAULIC TUBE ASSEMBLY
20	7349	1	#20 HYDRAULIC TUBE ASSEMBLY
21	7350	1	#21 HYDRAULIC TUBE ASSEMBLY
22	7351	1	#22 HYDRAULIC TUBE ASSEMBLY
23	7352	1	#23 HYDRAULIC TUBE ASSEMBLY
24	7353	1	#24/26 HYDRAULIC TUBE ASSEMBLY
25	7354	1	#25/27 HYDRAULIC TUBE ASSEMBLY
26	7353	1	#24/26 HYDRAULIC TUBE ASSEMBLY
27	7354	1	#25/27 HYDRAULIC TUBE ASSEMBLY
28	7357	1	#28/31 HYDRAULIC TUBE ASSEMBLY
29	7358	1	#29/30 HYDRAULIC TUBE ASSEMBLY
30	7358	1	#21 HYDRAULIC TUBE ASSEMBLY
31	7359	1	#28/31 HYDRAULIC TUBE ASSEMBLY
32	7360	1	#32/34 HYDRAULIC TUBE ASSEMBLY
33	7361	1	#33/35 HYDRAULIC TUBE ASSEMBLY
34	7360	1	#32/34 HYDRAULIC TUBE ASSEMBLY
35	7361	1	#33/35 HYDRAULIC TUBE ASSEMBLY
36	7362	1	#36 HYDRAULIC TUBE ASSEMBLY
37	7363	1	#37/38/41 HYD. TUBE ASSEMBLY
38	7363	1	#37/38/41 HYD. TUBE ASSEMBLY
39	7364	1	#39 HYDRAULIC TUBE ASSEMBLY
40	7365	1	#40 HYDRAULIC TUBE ASSEMBLY
41	7363	1	#37/38/41 HYD. TUBE ASSEMBLY
42	7367	1	#42 HYDRAULIC TUBE ASSEMBLY
43	7404	1	#43 HYDRAULIC TUBE ASSEMBLY
44	7405	1	#45 HYDRAULIC TUBE ASSEMBLY
45	7486	1	#45 HYDRAULIC TUBE ASSEMBLY
46	7384	8	HOSE, DRIVE AND PUMP
47	7382	4	HOSE, WHEEL MOTOR DRAIN
48	7381	4	HOSE, AXLE CYLINDER
49	7972	8	HOSE, ASSEMBLY OUTRIGGER
50	7478		HOSE, BRAKE
51	7383	2	HOSE, STEERING
52	6716	2	HOSE, STEERING X-OVER



# Notes:

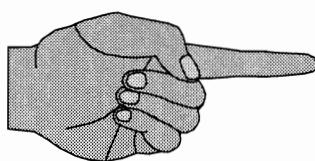


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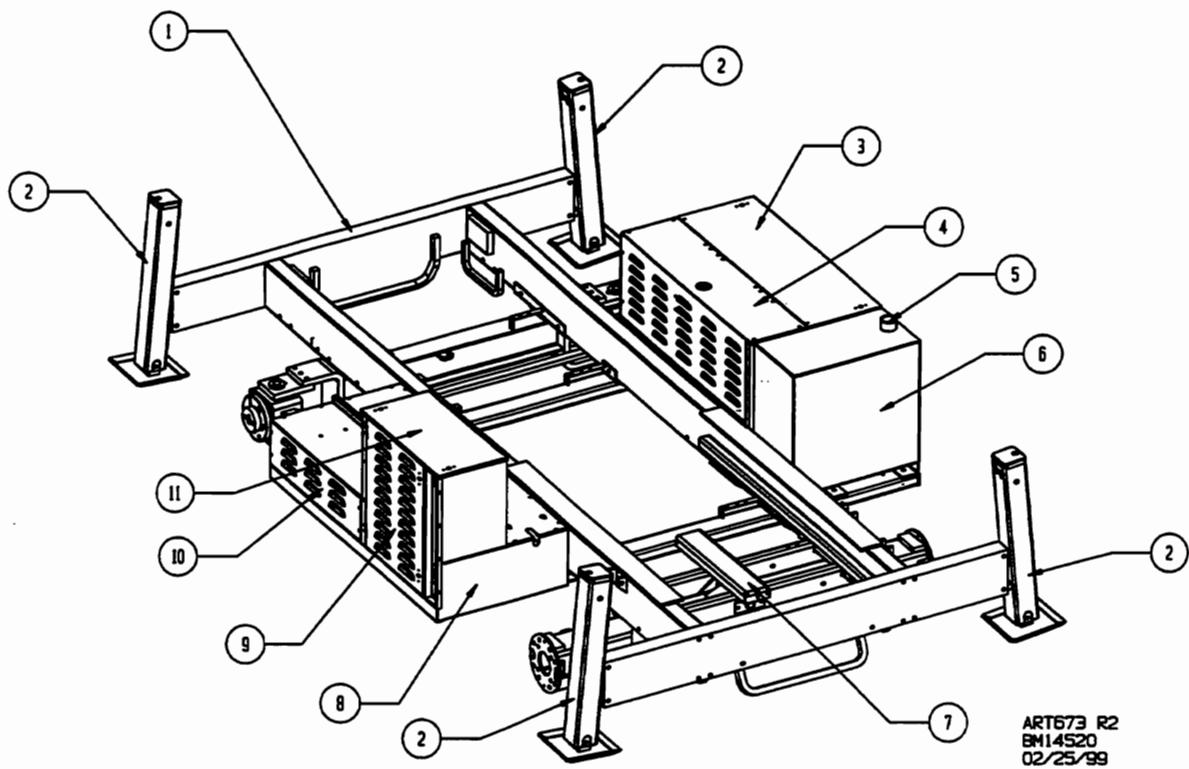
**Base**



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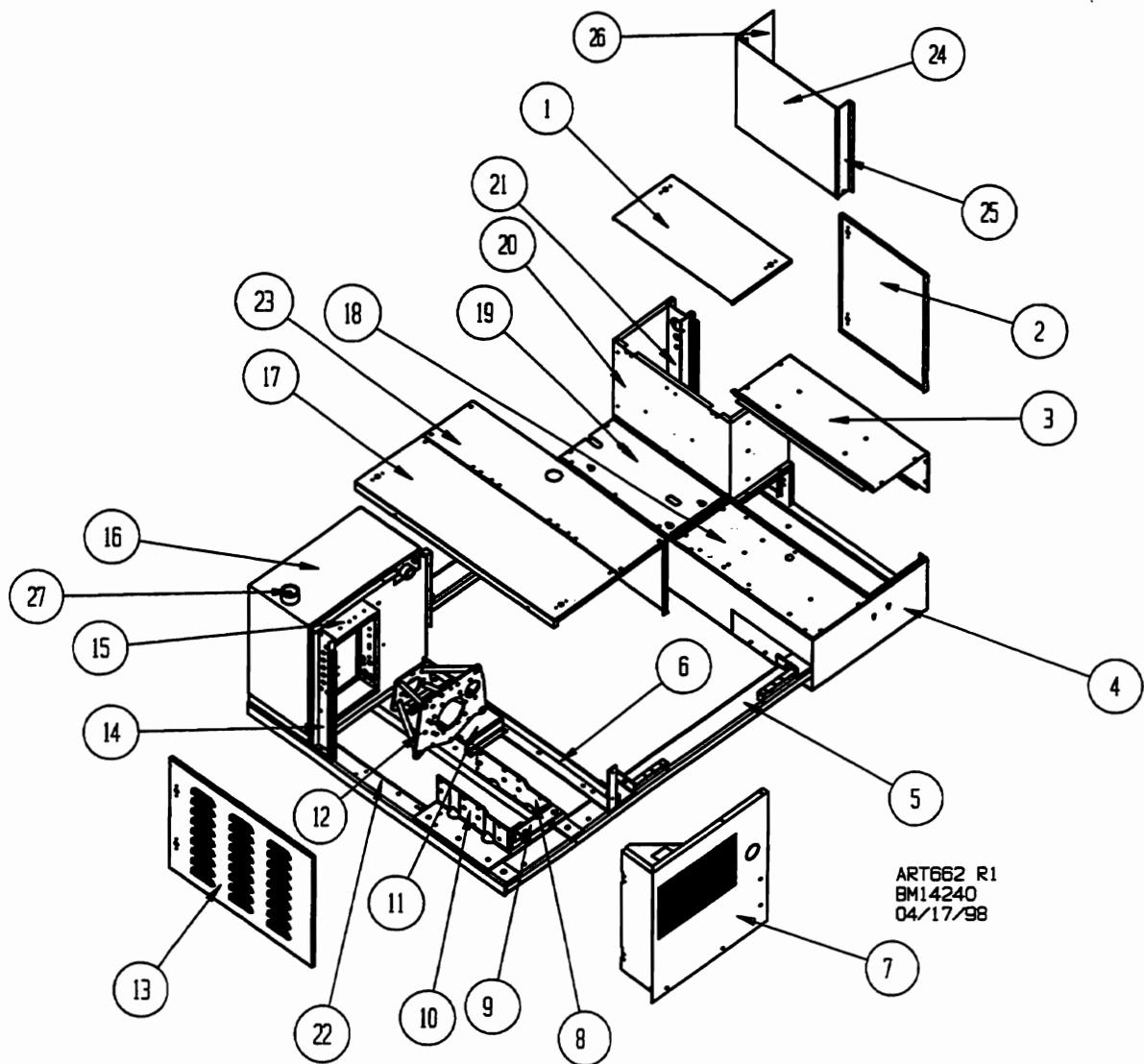
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**Figure 8A - Base Assembly W/Outriggers**

## Figure 8A - Base Assembly W/Outriggers

ITEM	PART NO.	QTY.	DESCRIPTION
1	10012	1	BASE WELDMENT - ATV
2	10911	4	OUTRIGGER ASSEMBLY
3	10209	1	DOOR - ENGINE TOP WELDMENT
4	10175	1	ENGINE COVER - INNER BACK
5	6978	2	CAP-GAS & HYD. OIL TANKS
6	10159	1	RESERVOIR WELDMENT
7	10592	1	AXLE ASS'Y - REAR
8	10399	1	COMPARTMENT TRAY WELDMENT
9	10413	1	DOOR, ELECTRICAL COMPARTMENT
10	10472	1	COVER WELDMENT OUT LP TANK
11	10412	1	COVER, ELEC. COMP.
<b>ITEMS BELOW: NOT SHOWN</b>			
	10326	2	CABLE TRAY FRONT & REAR
	10481	1	COVER CABLE TRAY REAR
	10479	1	COVER CABLE TRAY L.H. FRONT
	10480	1	COVER CABLE TRAY R.H. FRONT

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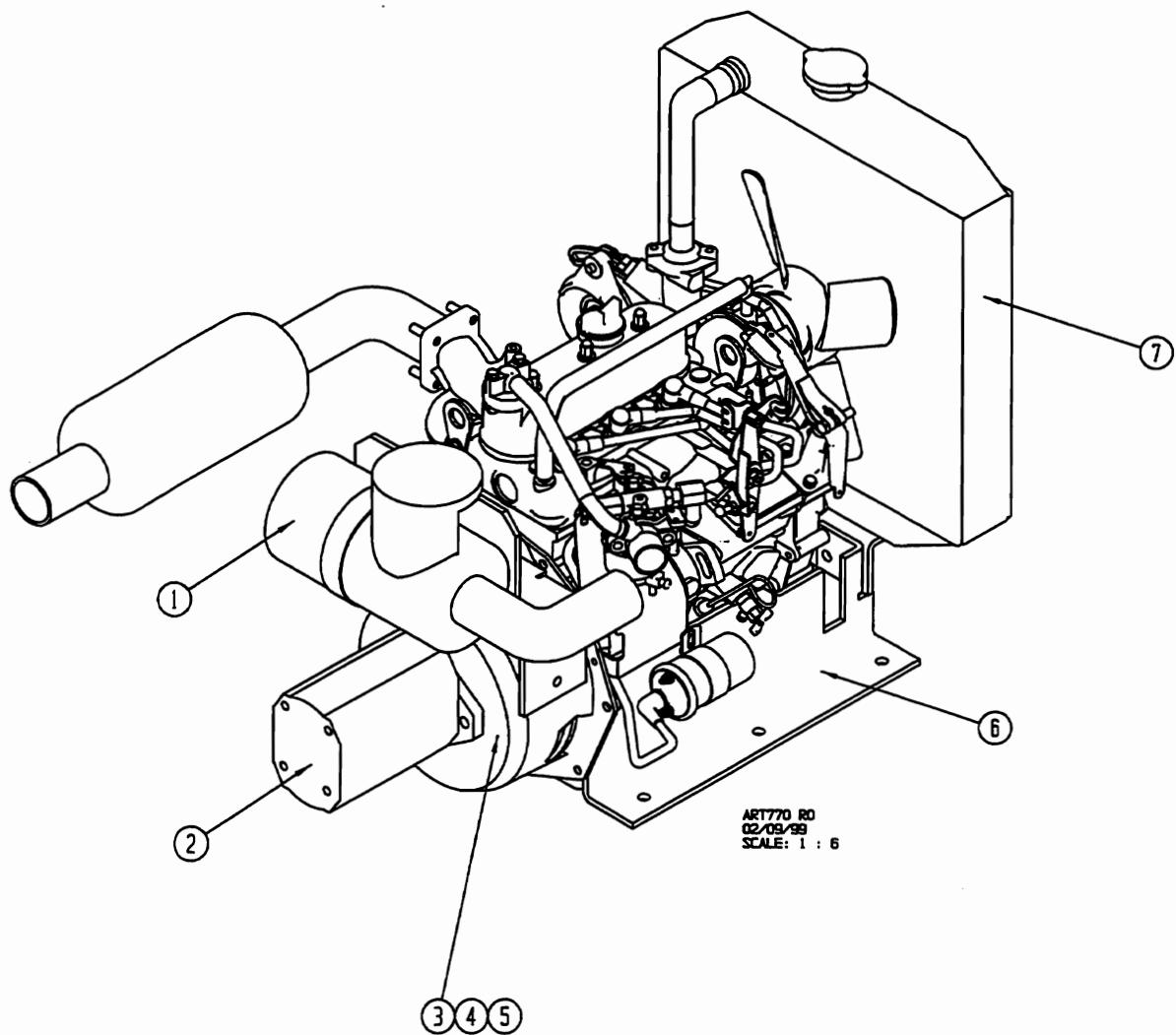
**Figure 8B - Dual Fuel Base Cabinets**

**Figure 8B - Dual Fuel Base Cabinets**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10412	1	COVER-ELECT. COMPONENT
2	10413	1	DOOR-ELECTRICAL COMPONENT
3	10472	1	COVER WLDMNT OUT LP TANK
4	10399	1	COMPONENT TRAY WELDMENT
5	10121	2	CROSS MEMBER WELDMENT
6	10380	1	MOTOR BASE INNER
7	10446	1	ENGINE COVER FRONT WELDMENT
8	10182	1	ENGINE MOUNT - INNER
9	10185	1	ENGINE MOUNT - CENTER
10	10179	1	ENGINE MOUNT - OUTER
11	10173	1	TRAY - BATTERY
12	10435	1	MOTOR PLATE WELDMENT
13	10494	1	ENGINE DOOR WELDMENT - SIDE
14	10256	1	INSTRUMENT PANEL
15	10171	1	INSTRUMENT -PANEL REAR
16	10159	1	RESERVOIR WELDMENT
17	10209	1	DOOR - ENGINE TOP WELDMENT
18	10391	1	COVER - INNER LP TANK
19	10390	1	COVER - FUEL TANK
20	10404	1	WRAPPER - ELECT. COMPARTMENT
21	10401	1	PANEL WELDMENT ELECTRICAL
22	10205	1	MOTOR BASE - OUTER
23	10175	1	ENGINE COVER - INNER BACK
24	10396	1	DOOR LARGE HINGED WELDMENT
25	10397	1	DOOR STOP WELDMENT ELECT.
26	10395	1	DOOR WELDMENT SHORT
27	6978	SERV	HYDRAULIC & GAS TANK CAP

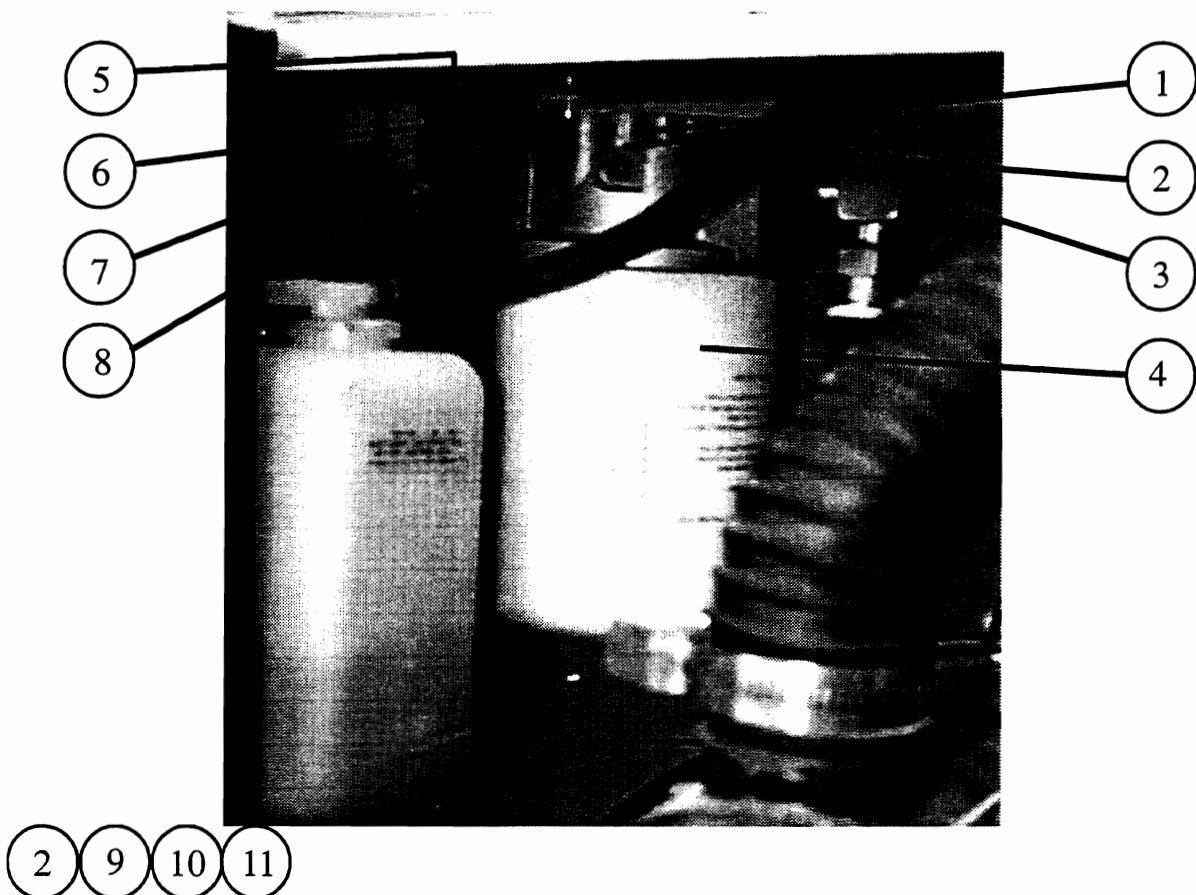
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04/17/98

## Figure 8C - Kubota Dual Fuel Engine (DF750)



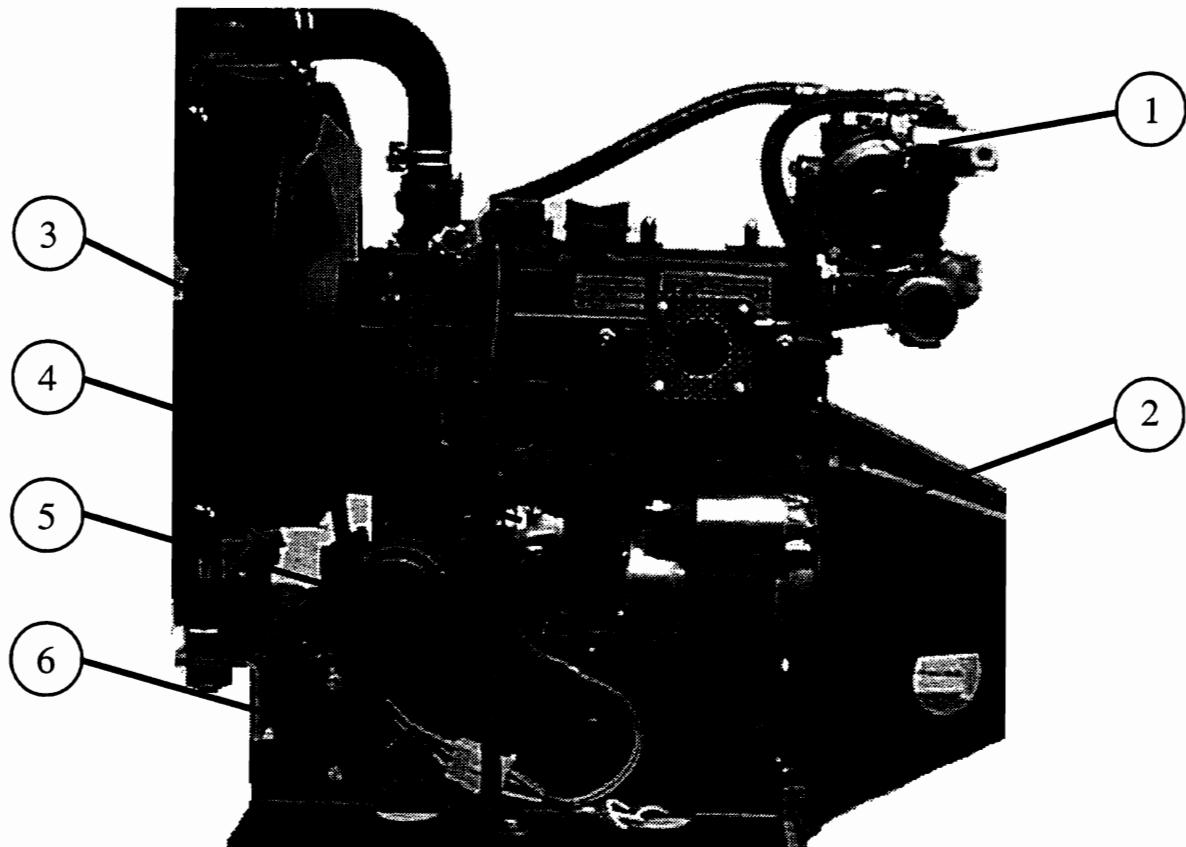
**Figure 8C - Kubota Dual Fuel Engine (DF750)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	8515	SERV.	AIR FILTER, KUBOTA 23 H.P. D/F
2	7318	1	PUMP, HYD. DUPLEX
3	9648	SERV.	HOUSING, PUMP KUBOTA DF750
4	9649	SERV.	COUPLING, PUMP, DF750 FLYWHEEL
5	9650	SERV.	DRIVE HUB, .750 SHAFT, PUMP
	9651	SERV.	HARDWARE KIT, DF750 KTR PUMP
6	10179	1	ENGINE MOUNT-OUTER
	10182	1	ENGINE MOUNT-INNER
	10185	1	ENGINE MOUNT-CENTER
7	8472	SERV.	RADIATOR KUBOTA-GAS
<b>ITEMS BELOW ARE NOT SHOWN</b>			
	6887	1	OIL PRESSURE SWITCH
	7398	2	SOLENOID, ENGINE SPEED/CHOKE
	9248	1	HARNESS, ENGINE KUBOTA
	9252	1	THROTTLE LINK-.10DIA X 5.5 LNG
	9256	1	CHOKE LINKAGE .08DIA. X 4.5LNG
	9278	1	RELAY 12 VOLT N/O W/SUPPRESSION
	HDW6895	1	PFELB45 M.37SAE M.25NPT

**Figure 8D - Hydraulic Filter & Fittings**

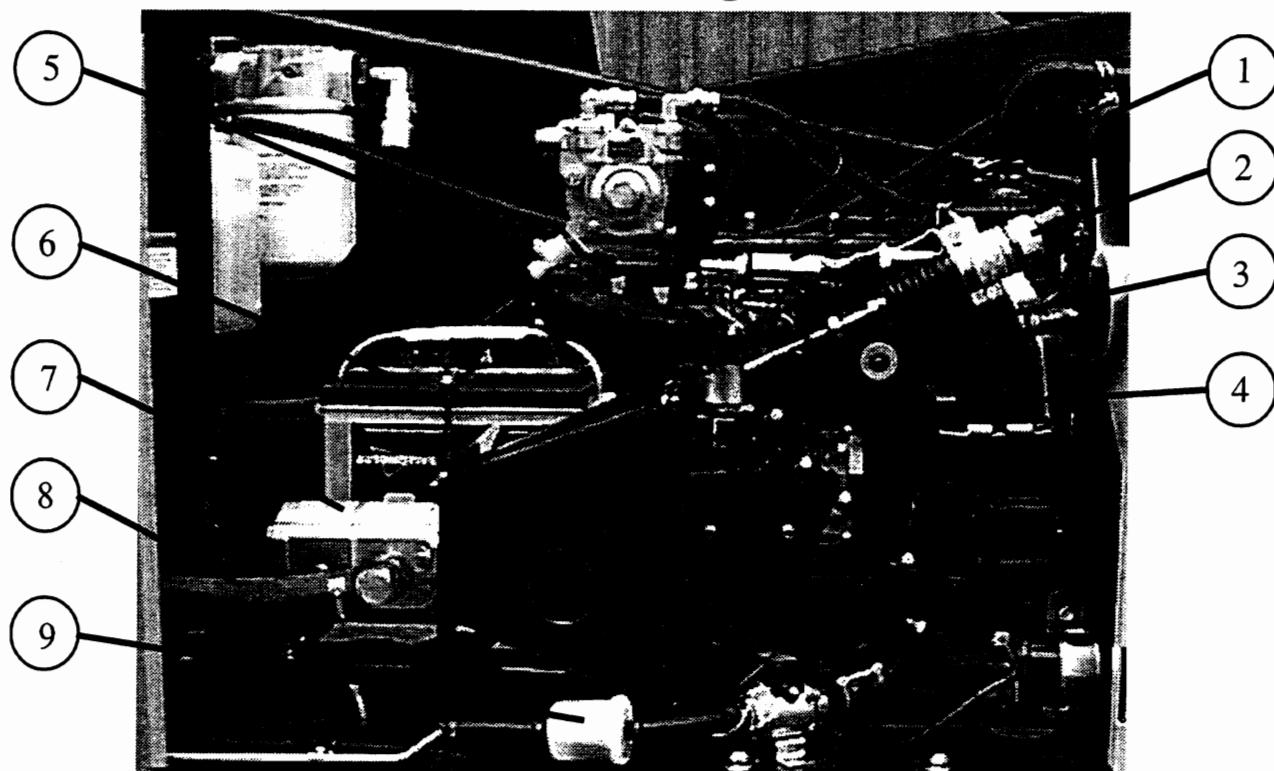
ITEM	PART NO.	QTY.	DESCRIPTION
1	7309	1	FILTER HEAD 1 1/4"
2	7505	2	BUSHING ADAPTER (1 1/4" NPT X 3/4")
3	7501	1	PFELB90 MO.75SAE MO.75NPT BNN
4	7310	1	FILTER CANISTER 10 MICRON
5	7500	1	PFELB90 MO.37JIC MO.25NPT SZN
6	6923	1	STREET ELBOW (1/4" X 1/4")
7	6655	1	1/4" STREET TEE, STEEL
8	6459	2	PFUNION MO.25NPTFH.31HOSEBNN
9	7506	1	NIPPLE, PIPE 1 1/4"
10	7329	1	FILTER, SUCTION STRAINER
11	7498	1	PFUNION MO.75NPTFH1.00HOSE BNN

## Figure 8E - Kubota Dual Fuel Engine (WG750)



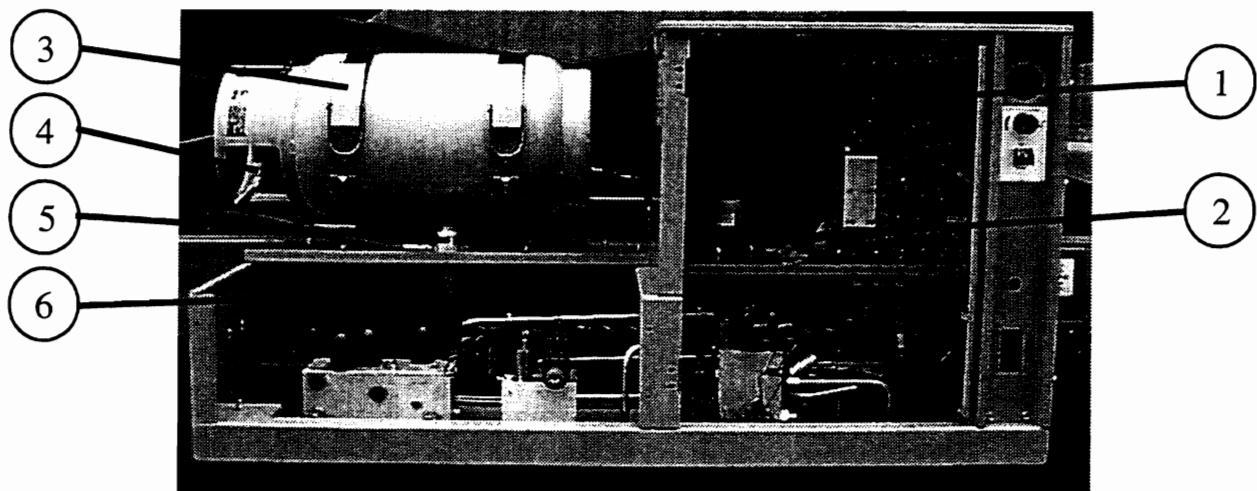
ITEM	PART NO.	QTY.	DESCRIPTION
1	6768	SERV.	L.P. LOCKOUT VALVE
2	8365	SERV.	STARTER KUBOTA 23 H.P. D.F.
3	9024	SERV.	DYNAMO KUBOTA 23 H.P. D.F.
4	6887	SERV.	OIL PRESSURE SWITCH
5	8516	SERV.	OIL FILTER KUBOTA 23 H.P. D.F.
6	8727	SERV.	RECTIFIER ASSY. KUBOTA 23 H.P. D.F.
** NOT SHOWN			
**	8515	SERV.	AIR FILTER KUBOTA 23 H.P. D.F.

## Figure 8F - Kubota Dual Fuel Engine (WG750)

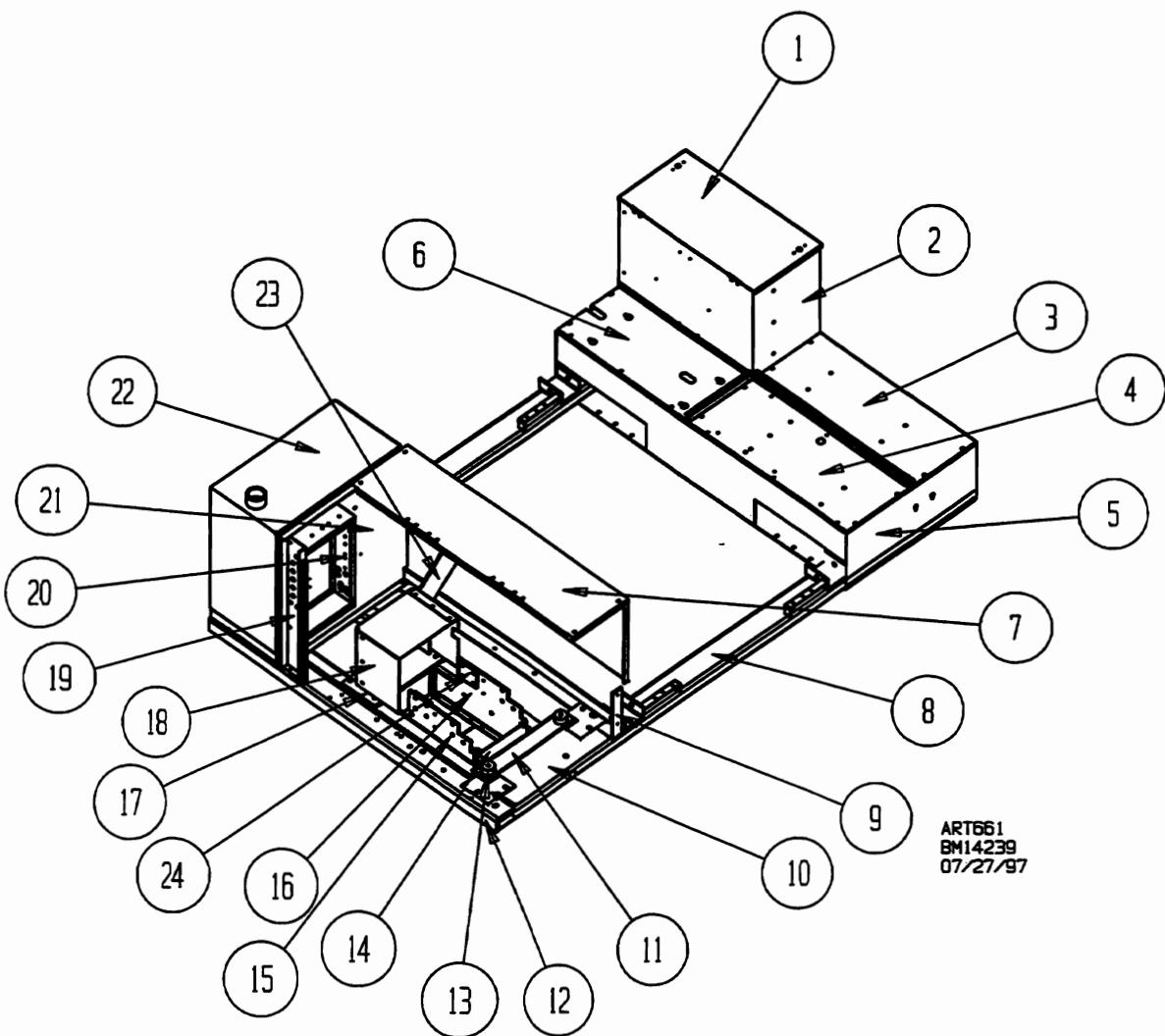


ITEM	PART NO.	QTY.	DESCRIPTION
1	7397	1	CHOKE SOLENOID
**	7454	1	ROLL PIN
2	7398	1	THROTTLE SOLENOID
**	10439	1	ACCELERATOR ACTUATOR WELDMENT
3	10349	1	ACCELERATOR BRACKET
4	10356	1	ACCELERATOR LEVER WELDMENT
**	10490	2	FLAT WASHER
**	7453	1	FLAT WASHER
5	7514	1	HOSE ASSEMBLY - RETURN
6	6854	1	12 VOLT STARTER BATTERY
**	7512	1	BATTERY CABLE - RED
**	7513	1	BATTERY CABLE - BLACK
**	3436	1	HOLD DOWN BAR - BATTERY
**	2987	2	HOLD DOWN ROD
**	HDW5217	2	FLAT WASHER
**	6110	2	WING NUT
7	7318	1	PUMP, HYDRAULIC DUPLEX
**	7286	1	COUPLER, LOVEJOY L100 - ENGINE
**	7287	1	SPIDER, COUPLING LOVEJOY L100
**	7319	1	COUPLER, LOVEJOY L100 - PUMP
8	9279	1	HOSE 1.0 ID X 12.5 LONG
9	8514	Serv.	FUEL FILTER, KUBOTA 23 H.P. D.F.

## Figure 8G - Dual Fuel Manifold Cabinet



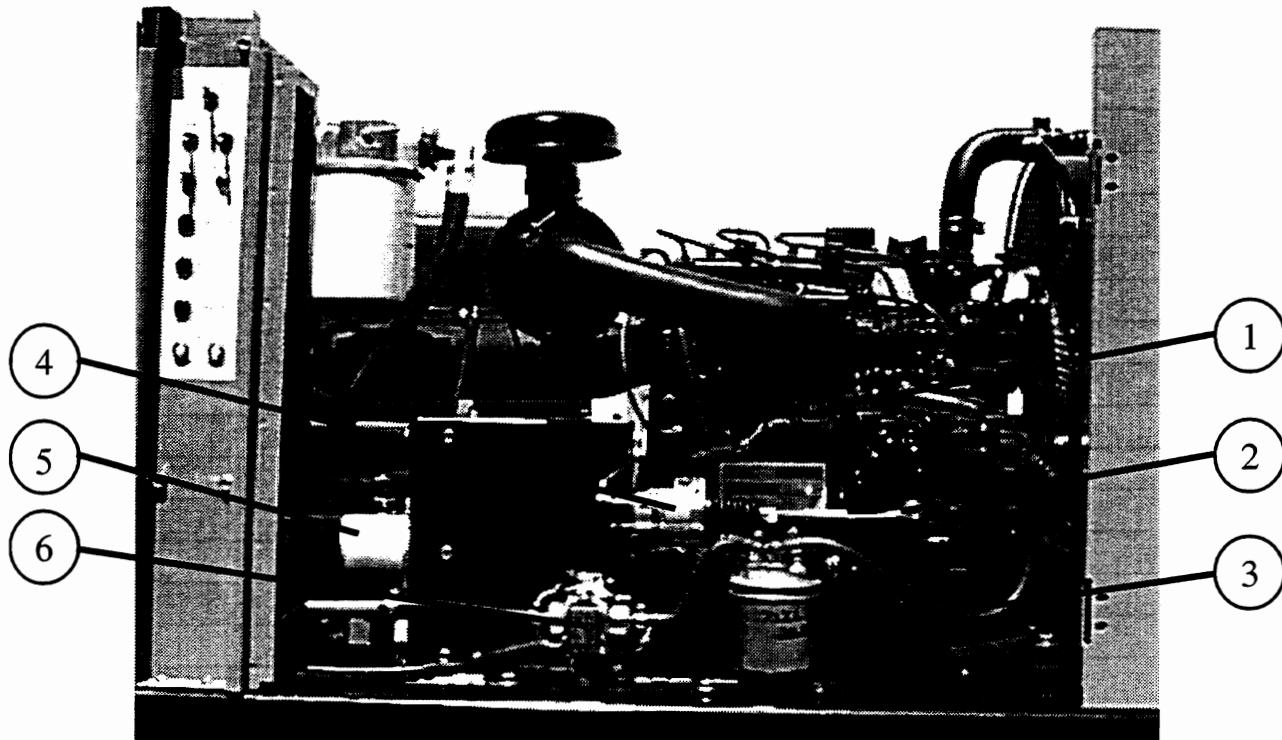
ITEM	PART NO.	QTY.	DESCRIPTION
1	9021	1	RELAY BOARD, SOLID STATE
**	9065	SERV.	OUTPUT HARNESS, RELAY BOARD
2	9324	1	TIP SENSOR 12V. (4.5 DEG.)
**	5723	4	BOLT (1/4 - 20 X 3/4)
**	5276	4	NUT (1/4 - 20)
3	6860	1	MOUNTING BRACKETS LP TANK
**	5204	4	BOLT (5/16 - 18 X 1)
**	5005	4	NUT (5/16 - 18)
4	6890	1	HOSE ASSEMBLY
**	6868	1	LP QUICK DISCONNECT
**	6895	1	45 DEGREE ELBOW
5	6861	1	BULKHEAD FILTER
**	6896	1	ADAPTER PIPE FITTING
**	6938	1	RELIEF VALVE LP GAS
6	7406	1	HOSE ASSEMBLY - LP GAS
**	6895	1	45 DEGREE ELBOW

**Figure 8H - Diesel Cabinets & Engine Mounts**

**Figure 8H - Diesel Cabinets & Engine Mounts**

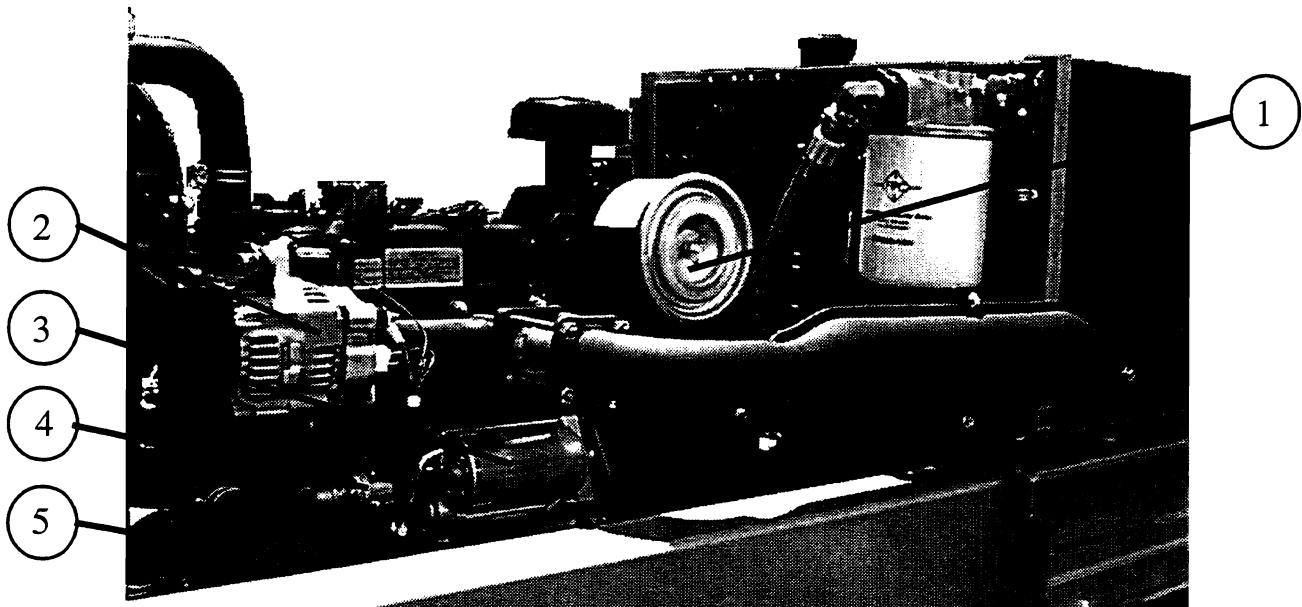
ITEM	PART NO.	QTY.	DESCRIPTION
1	10471	1	COVER WELDMENT ELECT TOP
2	10404	1	WRAPPER, ELECTRICAL COMPARTMENT
3	10472	1	COVER WELDMENT OUT LP TANK
4	10391	1	COVER-INNER LP TANK
	3431	1	BATTERY BOX WELDMENT
5	10399	1	COMPONENT TRAY WELDMENT
6	10390	1	COVER - FUEL TANK
	10706	1	TANK FUEL - DIESEL
7	10690	1	COVER ENGINE INNER - DIESEL
8	10121	2	CROSSMEMBER WELDMENT
9	10380	1	MOTOR BASE - INNER
10	10674	1	PLATE BASE WELDMENT FRT - DIESEL
11	10679	1	MOTOR SUPPORT WELDMENT - DIESEL
12	10205	1	MOTOR BASE - OUTER
13	7736	8	INSULATOR RUBBER
	10685	4	SPACER INSULATOR
	10687	4	WRFLAT Ø.392.1,6230, 171STZNY
14	10694	1	SKID PLATE FRT. - DIESEL
	10693	1	SKID PLATE REAR - DIESEL
15	10634	1	MOTOR MOUNT RH - DIESEL
16	10635	1	MOTOR MOUNT LH - DIESEL
17	10683	1	PUMP MOUNTING WELDMENT - DIESEL
18	10700	1	GUARD OUTSIDE COUPLING - DIESEL
	10699	1	GUARD INSIDE COUPLING - DIESEL
19	10495	1	INSTR. PANEL WELDMENT-ENGINE SIDE
20	10171	1	INSTR. PANEL REAR
21	10181	1	REAR BULKHEAD ENGINE CABINTRY
22	10159	1	RESERVOIR WELDMENT
	6978	1	CAP GAS & HYD. OIL TANKS
23	10684	1	SUPPORT EXHAUST - DIESEL
	10686	2	CLIP RETAINING EXHAUST - DIESEL
24	10680	2	SPACER - MOTOR HOUSING

ART661  
BM14239  
07/27/97

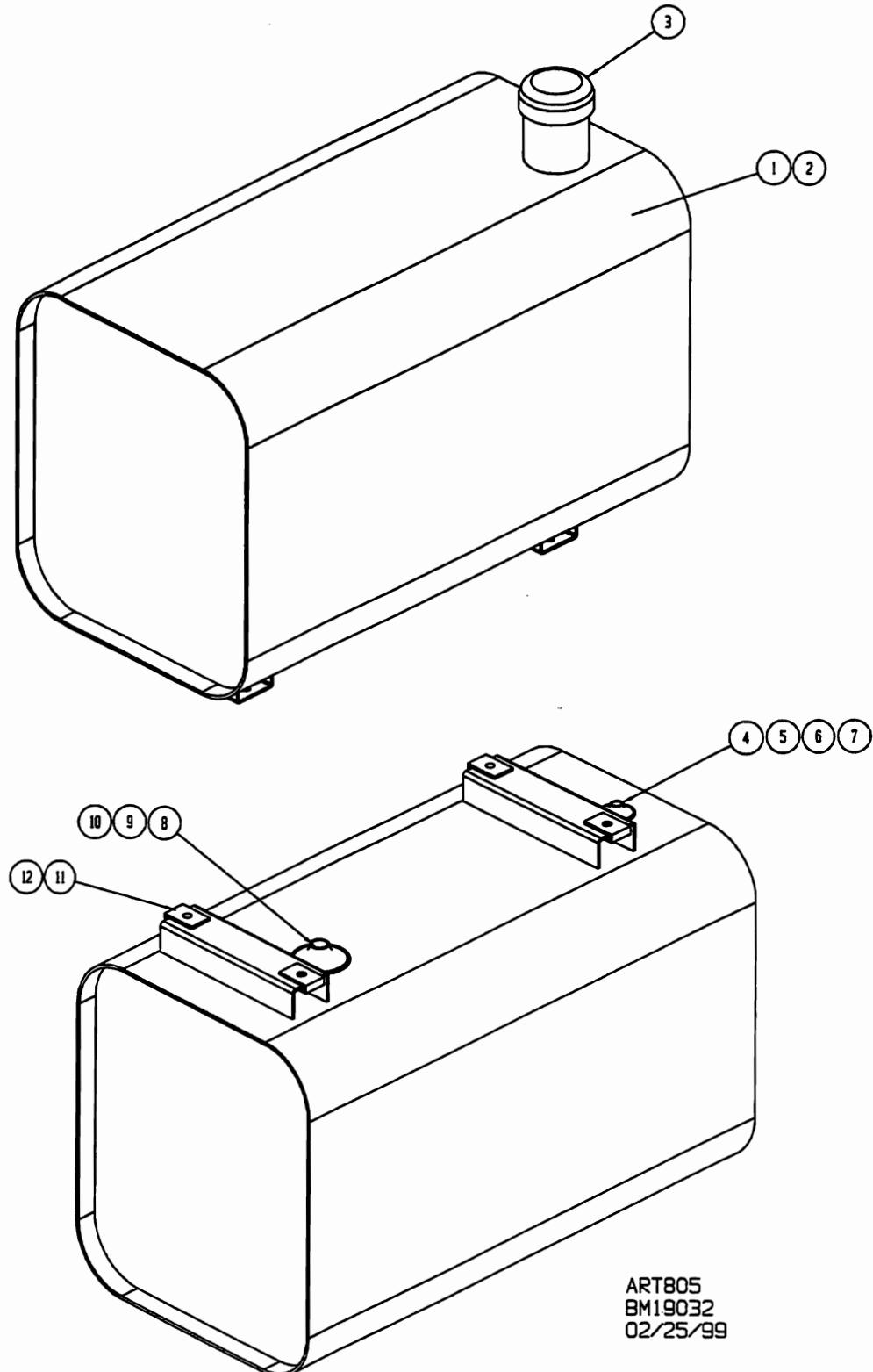
**Figure 8I - Kubota Diesel Engine Components**

ITEM	PART NO.	QTY	DESCRIPTION
1	8001	SERV.	FUEL SOLENOID DIESEL
2	7743	1	THROTTLE CABLE ASSEMBLY
3	8666	SERV.	FUEL FILTER DIESEL
4	7398	1	THROTTLE SOLENOID
5	7318	1	PUMP
	10738	1	COUPLER LOVEJOY L110
	7850	1	SPIDER L110
	20060	1	COUPLER LOVEJOY L110
6	8035	SERV.	FUEL PUMP KUBOTA DIESEL

## Figure 8J - Kubota Diesel Engine Components



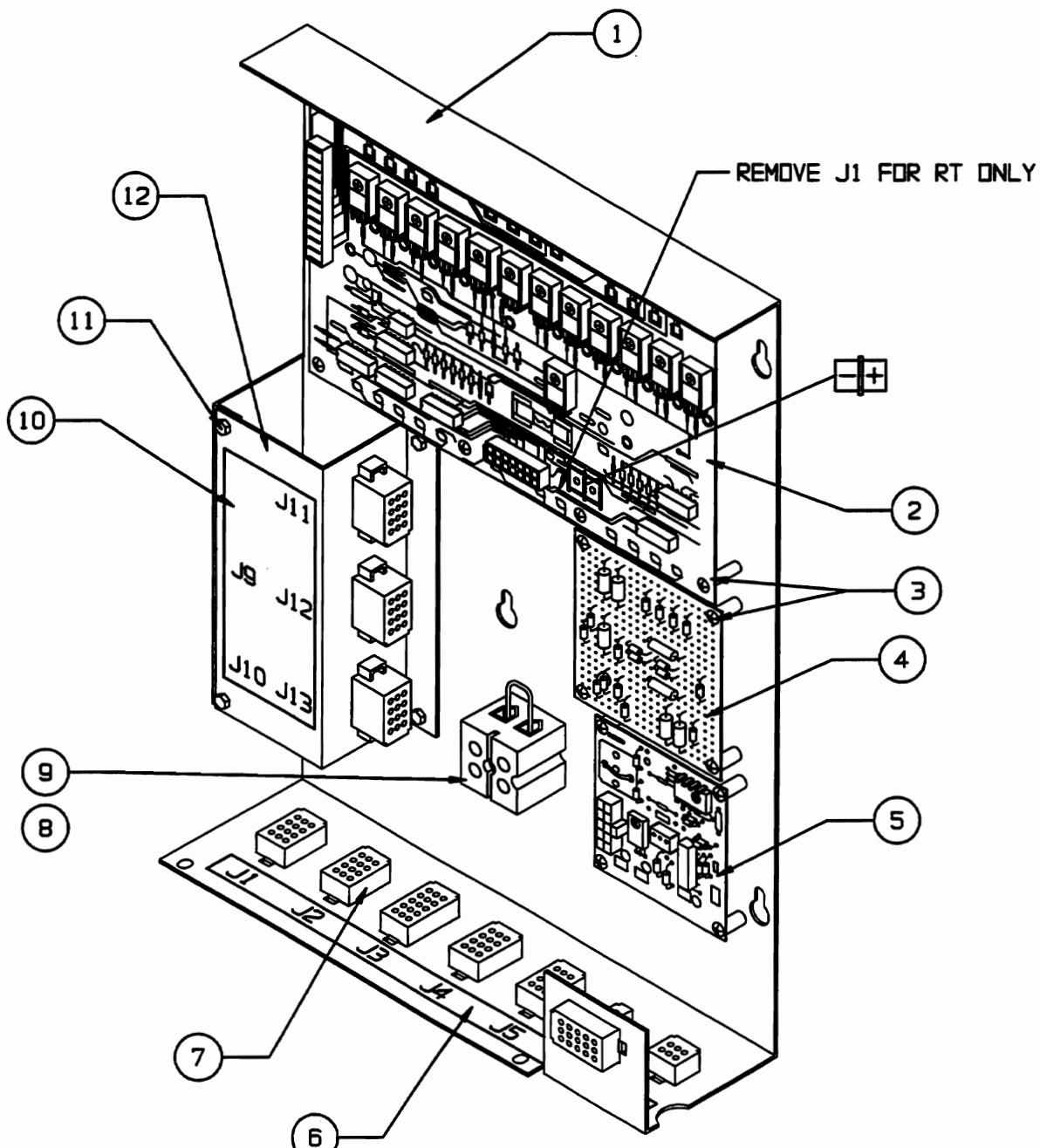
ITEM	PART NO.	QTY	DESCRIPTION
1	8667	SERV.	AIR FILTER KUBOTA DIESEL
2	7975	SERV.	ALTERNATOR KUBOTA DIESEL
3	8413	SERV.	STARTER KUBOTA DIESEL D1005
4	6887	1	OIL PRESSURE SWITCH
5	8665	SERV.	OIL FILTER KUBOTA DIESEL

**Figure 8K - Fuel Tank Assembly - Gas & Diesel**

## Figure 8K - Fuel Tank Assembly - Gas & Diesel

ITEM	PART NO.	QTY.	DESCRIPTION
1	10473	1	FUEL TANK - GASOLINE
2	10706	1	FUEL TANK - DIESEL
3	6978	1	CAP GAS & HYD. TANKS
4	HDW6863	2	ELBOW - MALE 1/8" BRASS
5	HDW7509	1	PFUNION M0.12NPTF M0.12NPTFBNN
6	6919	1	SHUTOFF VALVE - GAS LINE
7	HDW7508	1	PFUNION F0.12NPTF H0.31 HOSE BNN
8	10703	1	PIPE FUEL RETURN (DIESEL ONLY)
9	HDW7745	1	NIPPLE BRASS 1/8"X2" (DSL ONLY)
10	HDW7746	1	PFUNION F0.125NPT H0.187 HOSE BNN (DSL ONLY)
11	HDW7032	4	NTNW/RT0.312 18B2 2BN (CLIP)
12	HDW5204	4	BTCAPHXFLS .312 181.00Z 5N

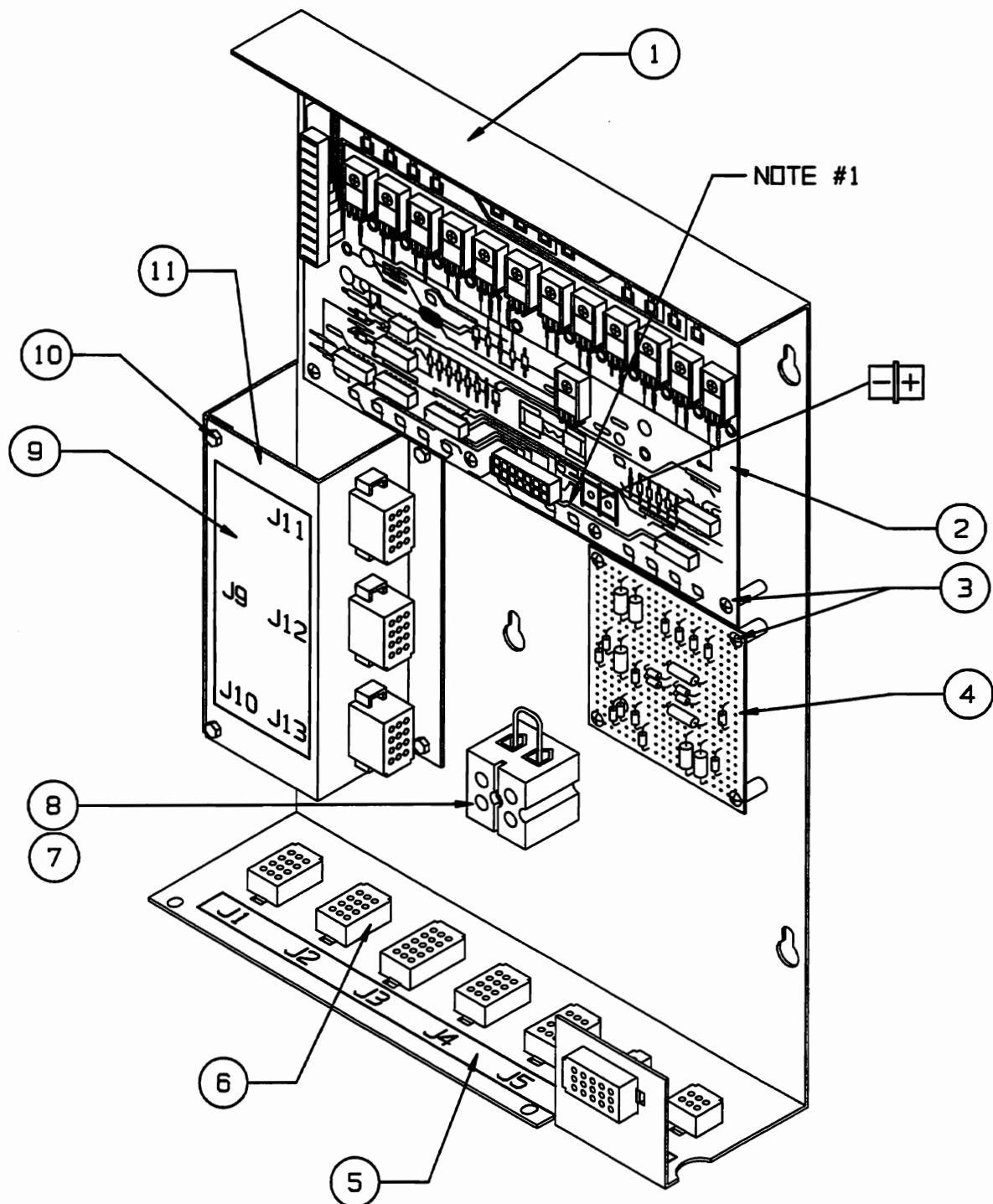
ART805  
BM19032  
02/25/99

**Figure 8L - Circuit Board Assembly for Toggle Box**ART-320 R4  
BM4813

## Figure 8L - Circuit Board Assembly for Toggle Box

ITEM	PART NO.	QTY.	DESCRIPTION
1	10455	1	CIRCUIT BOARD R.H.
2	9021	1	RELAY BOARD, SOLID STATE
	9065	SERV	ADAPTER HARNESS, OUTPUT
3	HDW7561	16	HYDRO ELECTRON #BN-002-B
4	7462	1	CIRCUIT BOARD COMPONENT
5	7291	1	CIRCUIT BOARD
6	7892	1	DECAL WIRING, J1-J8, QUADREX
7	7530	1	HARNESS ASS'Y, MAIN PANEL
8	HDW7231	1	BTCAPPANSLT #6 321.25Z 5N
9	7492	1	TERMINAL BLOCK
10	7893	1	DECAL WIRING, J9-J13, QUADREX
11	HDW8289	4	BTSTFHEX SLT #10
12	10456	1	CIRCUIT BOARD BRACKET

ART-320 84  
B44813

**Figure 8M - Circuit Board Assembly for Joystick**

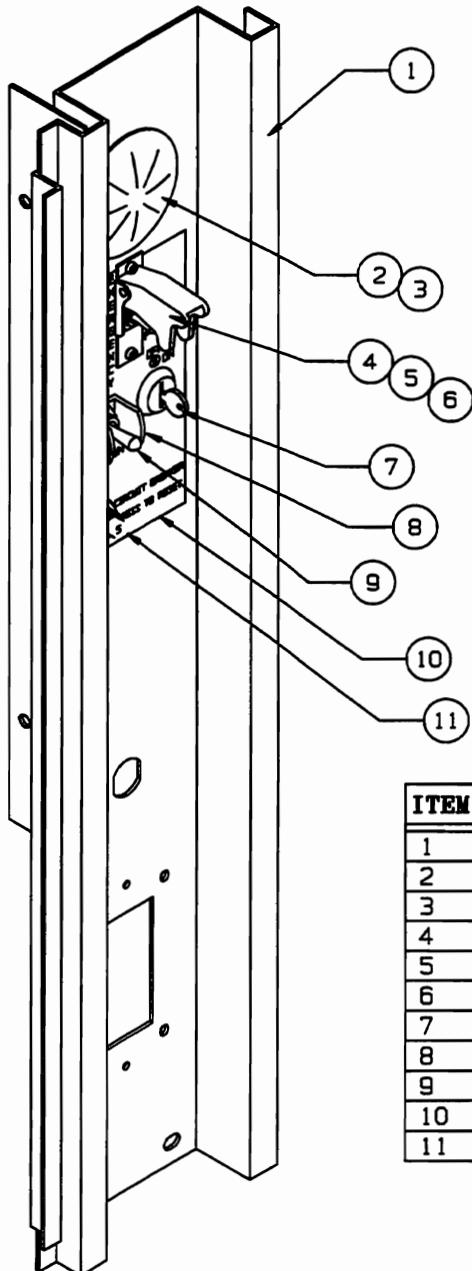
ART-555 R4  
BM12233

## Figure 8M - Circuit Board Assembly for Joystick

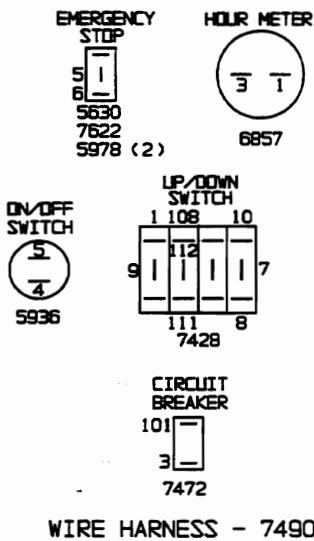
ITEM	PART NO.	QTY.	DESCRIPTION
1	10455	1	CIRCUIT BOARD R.H.
2	9021	1	RELAY BOARD, SOLID STATE
	9065	SERV	ADAPTER HARNESS, OUTPUT
3	HDW7561	16	HYDRO ELECTRON #BN-002-B
4	8537	1	BASE CIRCUIT BOARD, JS RT
5	7892	1	DECAL WIRING, J1-J8, QUADREX
6	8543	1	HARNESS ASS'Y, MAIN PANEL
7	HDW7231	1	BTCAAPPANSLT #6 321.25Z 5N
8	7492	1	TERMINAL BLOCK
9	7893	1	DECAL WIRING, J9-J13, QUADREX
10	HDW8289	4	BTSTFHEX SLT #10
11	10456	1	CIRCUIT BOARD BRACKET

ART-555 R4  
BM12233

## Figure 8N - Switch Panel Assembly - Old Style



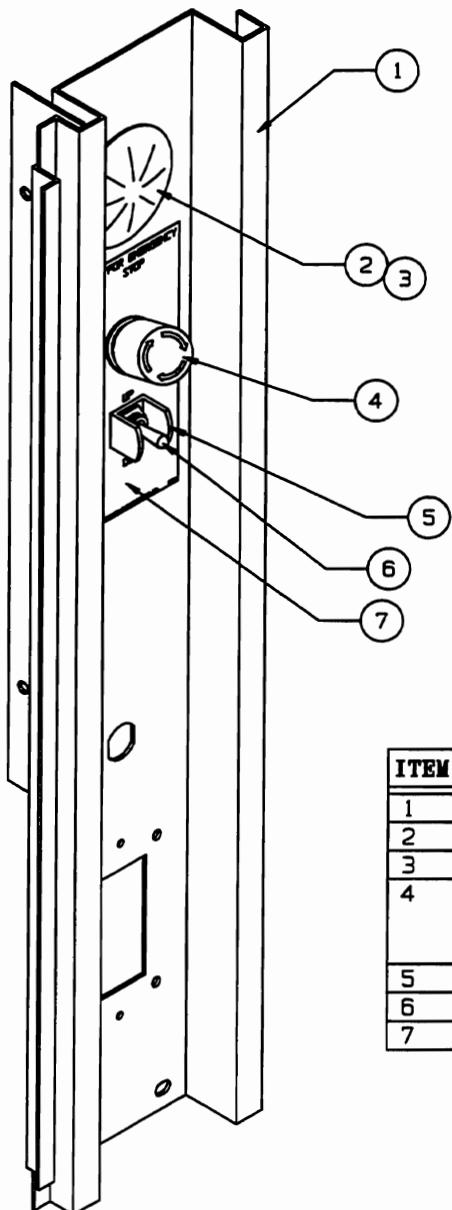
**SWITCH PANEL ELECTRICAL SIDE - QUADREX  
PANEL ASSEMBLY 10589**  
SERIAL #10700100 THROUGH #10700226  
SERIAL #10800100 THROUGH #10800315



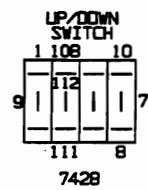
ITEM	PART NO.	QTY.	DESCRIPTION
1	20981	1	PANEL WELDMENT
2	7115	1	PLUG
3	6857	1	HOUR METER (OPTION)
4	5630	1	TOGGLE SWITCH
5	7622	1	SWITCH GUARD
6	5978	2	SCREW, #6-32 X 1/4, GRADE 5
7	5936	1	KEY SWITCH
8	1313	1	SWITCH GUARD
9	7428	1	3 POSITION TOGGLE SWITCH
10	7667	1	DECAL
11	7472	1	5 AMP CIRCUIT BREAKER

ART315 RS  
BM4808  
03/12/99

## Figure 8O - Switch Panel Assembly - New Style



SWITCH PANEL ELECTRICAL SIDE - QUADREX  
PANEL ASSEMBLY 10971  
SERIAL #10700227 THROUGH PRESENT  
SERIAL #10800316 THROUGH PRESENT

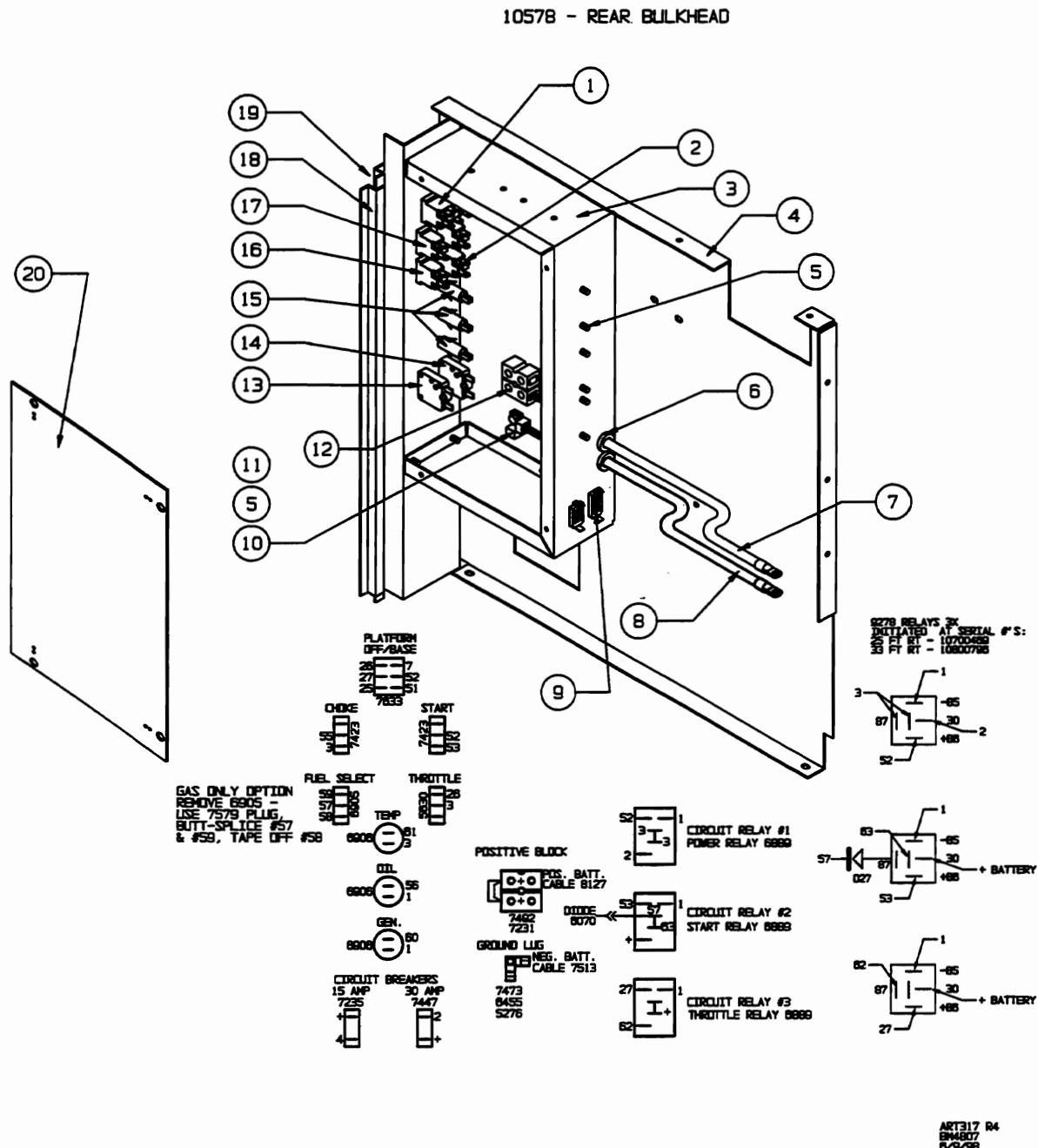


WIRE HARNESS - 8542

ITEM	PART NO.	QTY.	DESCRIPTION
1	10401	1	PANEL WELDMENT
2	7115	1	PLUG
3	6857	1	HOUR METER (OPTION)
4	7800 9345 8083	1	STOP SWITCH ASSEMBLY BLOCK-CONTACT N.C. (ABB) OR BLOCK-CONTACT N.C. (TELEMECANIQUE)
5	1313	1	SWITCH GUARD
6	7428	1	3 POSITION TOGGLE SWITCH
7	8674	1	DECAL

ART315 RS  
BM4808  
03/12/99

## Figure 8P - Engine Bulkhead Assembly - Dual Fuel

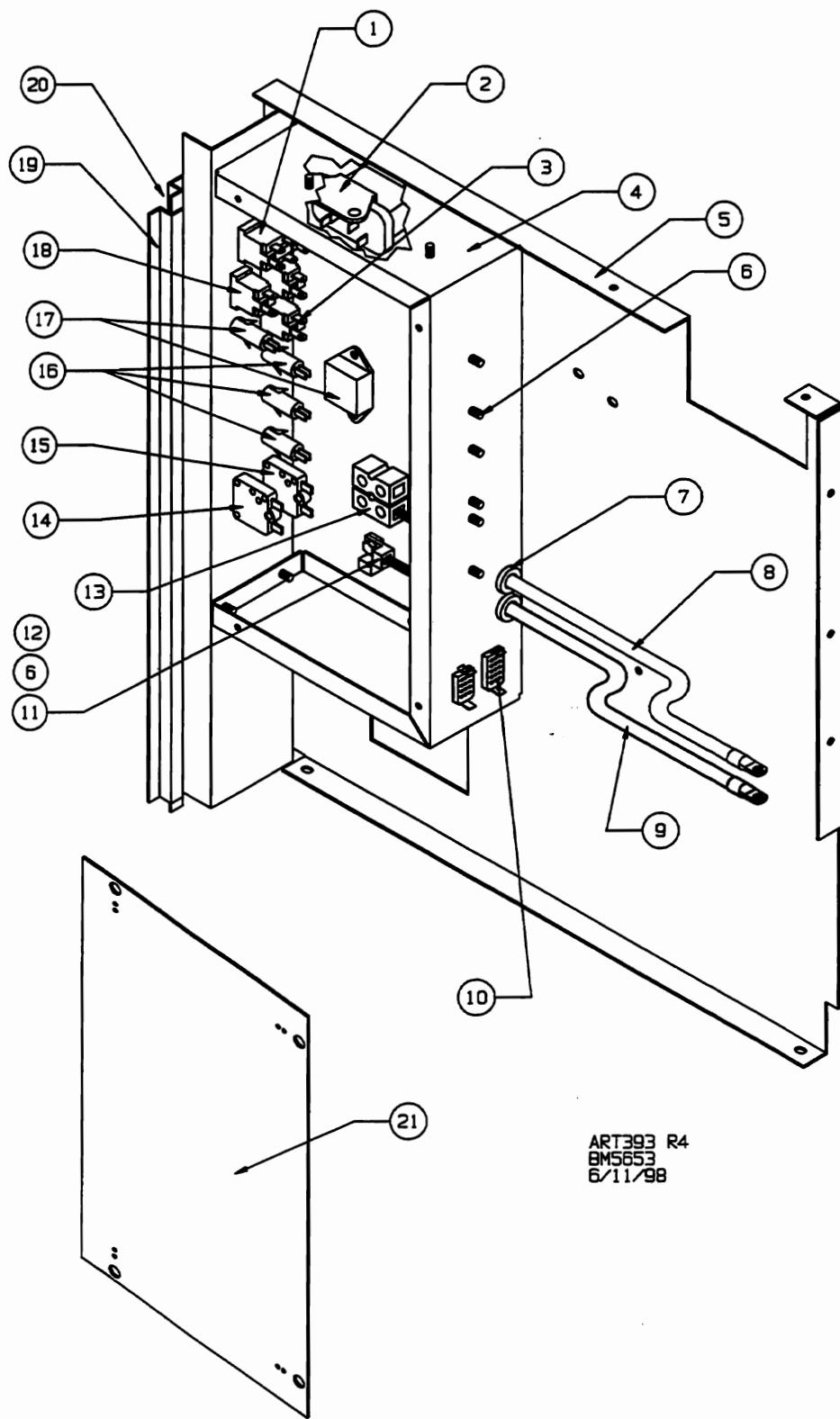


## Figure 8P - Engine Bulkhead Assembly - Dual Fuel

ITEM	PART NO.	QTY.	DESCRIPTION
1	7633	1	SWITCH, TOGGLE 3 POSITION
2	5630	1	SWITCH, TOGGLE
3	10171	1	INSTRUMENT PANEL REAR
4	10181	1	REAR BULKHEAD - ENGINE CAB.
5	6455	18	.250 20 0.50 ZINC PLATE W/CLEAR CHROMAT
6	7459	2	GROMMET
7	7512	1	CABLE BATTERY (RED)
8	7513	1	CABLE BATTERY (BLACK)
9	7493	1	WIRE HARNESS - ENGINE CONSOLE
10	7473	2	POWER CONNECTOR
11	HDW5276	2	NTHEX 0.250 20Z 5N
12	HDW7231	1	BTMCHHEX WRSLT #6 321.25Z 5N
13	7235	1	CIRCUIT BREAKER 15 AMP MANUAL
14	7447	1	CIRCUIT BREAKER 30 AMP
15	6906	3	INDICATOR LIGHT
16	6905	1	TOGGLE SWITCH
17	7423	2	SWITCH, TOGGLE 1 POLE 2 POS.
18	10495	1	INSTUMENT PNL WLDMNT - ENGINE SIDE
19	7420	1	DECAL - ENGINE COMPARTMENT
20	10474	1	REAR COVER INSTRUMENT PANEL
	7540	4	LATCH, CABINET
	7541	4	RIVET, LATCH

ART317 R4  
BM4607  
5/9/98

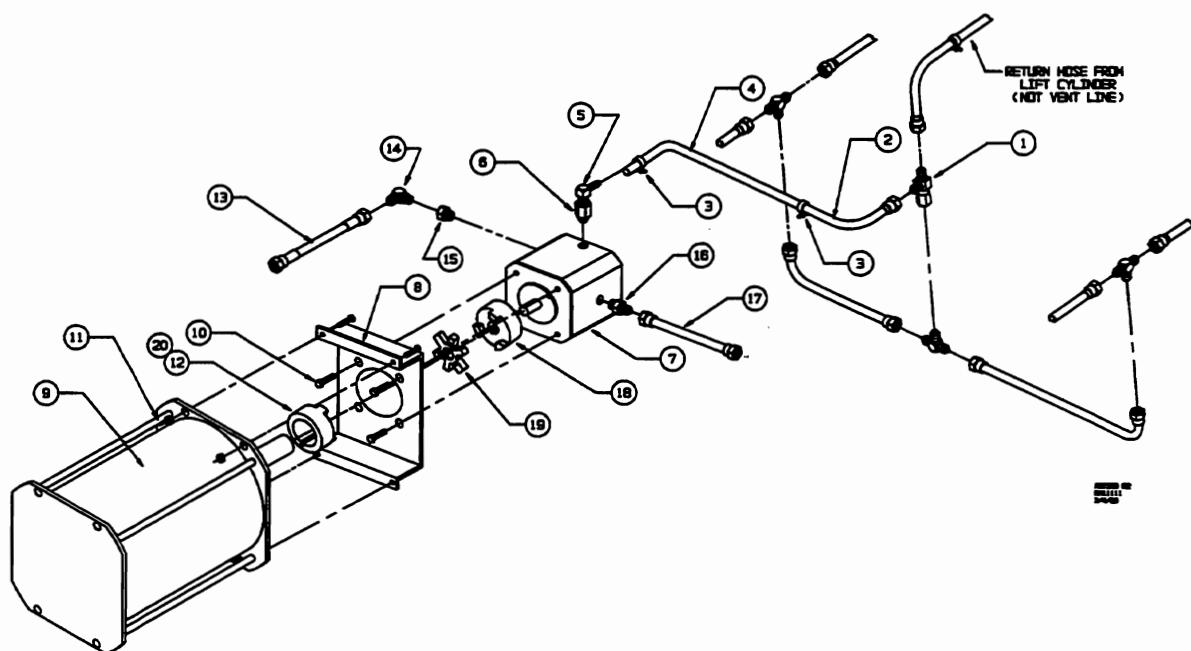
## Figure 8Q - Engine Bulkhead Assembly - Diesel



## Figure 8Q - Engine Bulkhead Assembly - Diesel

ITEM	PART NO.	QTY.	DESCRIPTION
1	7633	1	SWITCH, TOGGLE 3 POSITION
2	6889 OR 9278	5	POWER RELAY 12 VOLT DC 25 AMP RELAY, 12 VOLT, N/O WITH SUPPRESSION
3	5630	1	SWITCH, TOGGLE
4	10171	1	INSTRUMENT PANEL REAR
5	10181	1	REAR BULKHEAD - ENGINE CAB.
6	6455	18	.250 20 0.50 ZINC PLATE W/CLEAR CHROMAT
7	7459	1	GROMMET
8	8127	1	BAT CBL - UL1283 #6 BLK 23.0"
9	7513	1	CABLE BATTERY (BLACK)
10	7790	1	WIRE HARNESS - ENGINE CONSOLE
11	7473	2	POWER CONNECTOR
12	5276	1	NTHEX 0.250 20Z 5N
13	7231	1	BTMCHHEXWRSLT #6 321.25Z 5N
14	7235	1	CIRCUIT BREAKER 15 AMP MANUAL
15	7447	1	CIRCUIT BREAKER 30 AMP
16	6906	1	INDICATOR LIGHT
17	N/A	2	SUPPLIED WITH ENGINE
18	7423	2	SWITCH, TOGGLE 1 POLE 2 POS.
19	10495	1	INSTRUMENT PNL WLDMNT - ENGINE SIDE
20	7769	1	DECAL - ENGINE COMPARTMENT DIESEL
21	10474	1	REAR COVER INSTRUMENT PANEL
	7540	4	LATCH, CABINET
	7541	4	RIVET, LATCH

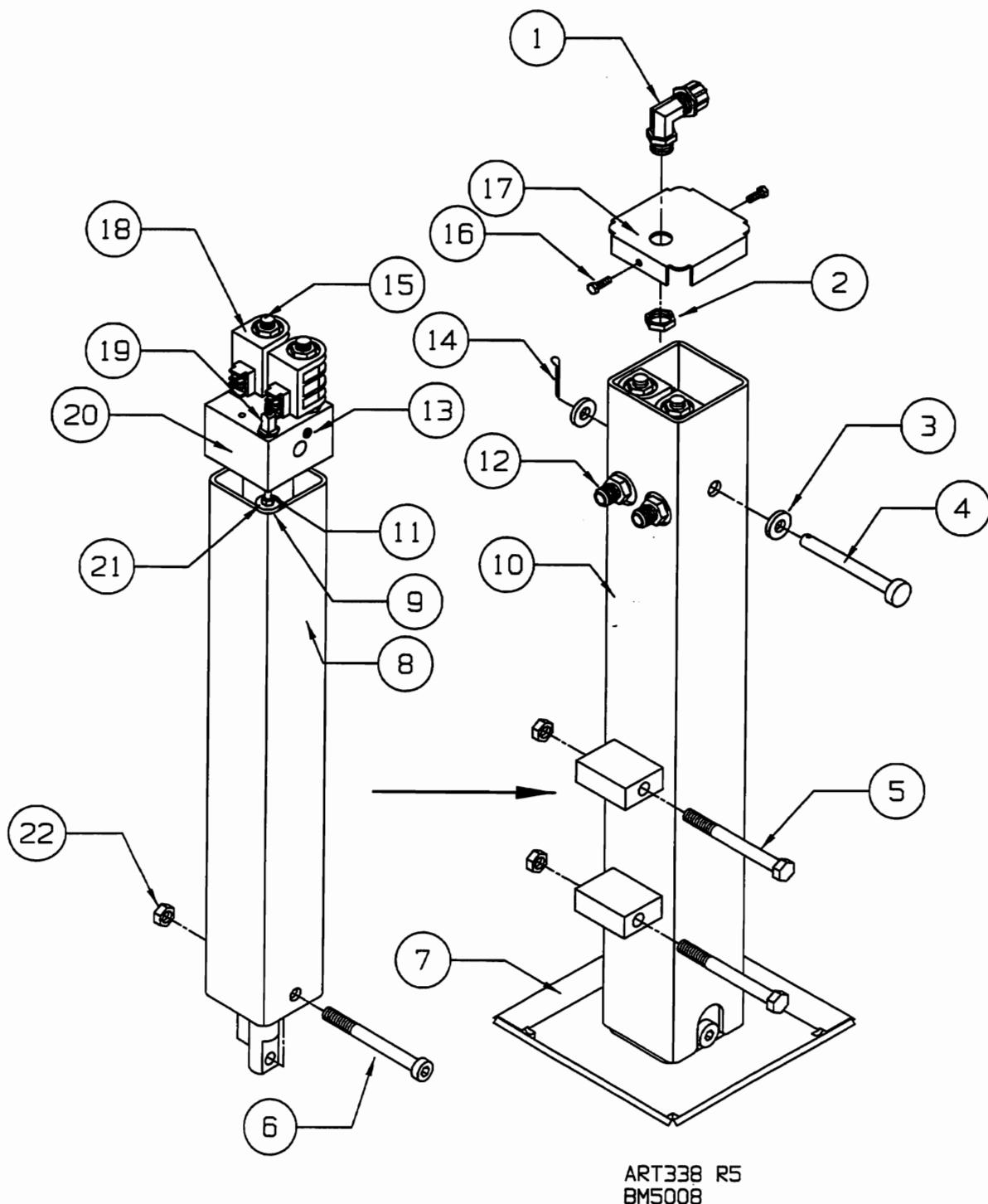
ART393 R4  
BM5653  
6/11/98

**Figure 8R - Generator Assembly (Optional)**

## Figure 8R - Generator Assembly (Optional)

ITEM	PART NO.	QTY.	DESCRIPTION
1	HDW8699	1	FITTING, PIPE, RUN-T, FEMALE 3/8, MALE 3/8, 37 DEG. FLARE
2	7521	1	TUBING-RETURN LINE ASSEMBLY
3	7788	2	CLAMP, HOSE
4	6458	3'	HOSE, RETURN LINE
5	HDW6727	1	FITTING, PIPE, ELBOW 90 DEG, MALE 31 HOSE BARB, MALE 25 NPT
6	HDW8700	1	FITTING, PIPE, ADAPTOR, MALE 1/4, 37 DEG FLARE, FEMALE 25 NPT
7	8701	1	MOTOR, HYDRAULIC, W/ CASE DRAIN
8	10529	1	BRACKET, GENERATOR MOUNTING
9	6876	1	GENERATOR
10	HDW5204	8	SCREW, 5/16-18, 1.00 LONG
11	HDW5005	4	NUT, 5/16-18
12	7558	1	COUPLER, LOVEJOY - GENERATOR
13	7597	1	HOSE, SHORT
14	HDW8081	1	FITTING, PIPE ELBOW 90 DEG. MALE 3/8" LIC, MALE 1/2" O-RING
15	HDW7387	1	FITTING, ADAPTER, MALE 5/8" O-RING, FEMALE 1/2 " O-RING, SZN
16	HDW7389	1	FITTING, PIPE ADAPTOR, MALE 37 DEG. MALE 1/2 O-RING
17	7598	1	HOSE ASSEMBLY-STRAIGHT FEMALE 37 DEG. STRAIGHT FEMALE 37 DEG. 3/8" ID, 28" LONG, SAE100R1
18	7557	1	COUPLER, LOVEJOY - HYDRAULIC MOTOR
19	7559	1	COUPLER, LOVEJOY - SPIDER
20	6910	1	KEY, 1/4" X 1/4" X 1 1/4"

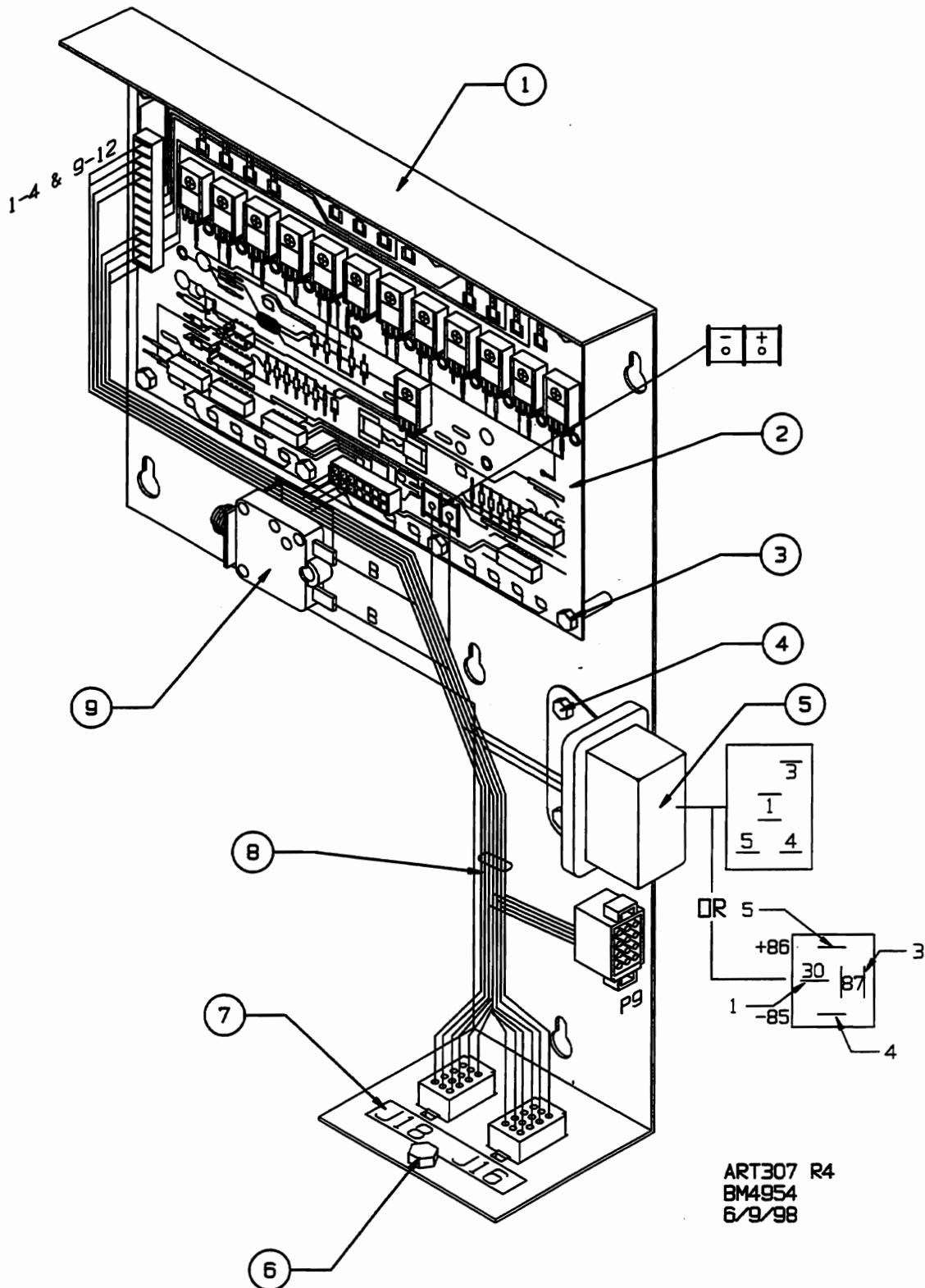
ART520 R2  
BM11111  
3/4/98

**Figure 8S - Hydraulic Outrigger Assembly (Optional)**

**Figure 8S - Hydraulic Outrigger Assembly (Optional)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	8005	1	90 DEG. CORD CONNECTOR
2	8006	1	CONNECTOR NUT - 1/2" CONDUIT
3	HDW5785	2	FLAT WASHER - 1 1/2" OD
4	HDW8007	1	CLEVIS PIN - 5/8 X 4 1/2" LONG
5	HDW7052	2	SCREW, 1/2 - 13 X 3 1/2", GRADE 5
6	HDW5916	1	SCREW, 1/2 - 13 X 4", GRADE 8
7	10340	1	OUTRIGGER FOOT WELDMENT
8	10335	1	INNER OUTRIGGER TUBE - ATV
9	10907	1	WASHER - ACTUATOR OUTRIGGER
10	10343	1	TUBE WELDMENT - OUTRIGGER
11	HDW8065	1	SCREW, 1/4 - 20 X 2 1/4"
12	HDW7438	2	ADAPTOR, MALE 3/8, 37 DEGREE FLARE
13	6423	2	1/8 - 27 NPT BRASS PLUG
14	5920	1	COTTER PIN, 1/8 DIA., 1" LONG
15	6973	2	VALVE, N.C. POPPET, 2 WAY
16	HDW6455	2	SCREW, 1/4 - 20 X 1/2", GRADE 5
17	10339	1	OUTRIGGER COVER
18	7674	2	COIL, 48 VOLT, DOUBLE SPADE QUAD ELEC
	6870	2	COIL 12 V 1 SPADE W/ DODE QUAD RT
19	6504	1	OUTRIGGER SWITCH
20	7137	1	CYLINDER ASSEMBLY
	8757	1	REPAIR KIT
21	HDW5276	1	NUT, 1/4 - 20, GRADE 5
22	HDW6349	3	NUT, 1/2 - 13, GRADE 5
	8056	1	WIRE HARNESS - AUX. TO OUTRIGGER (NOT SHOWN)

ART338 R5  
BM5008

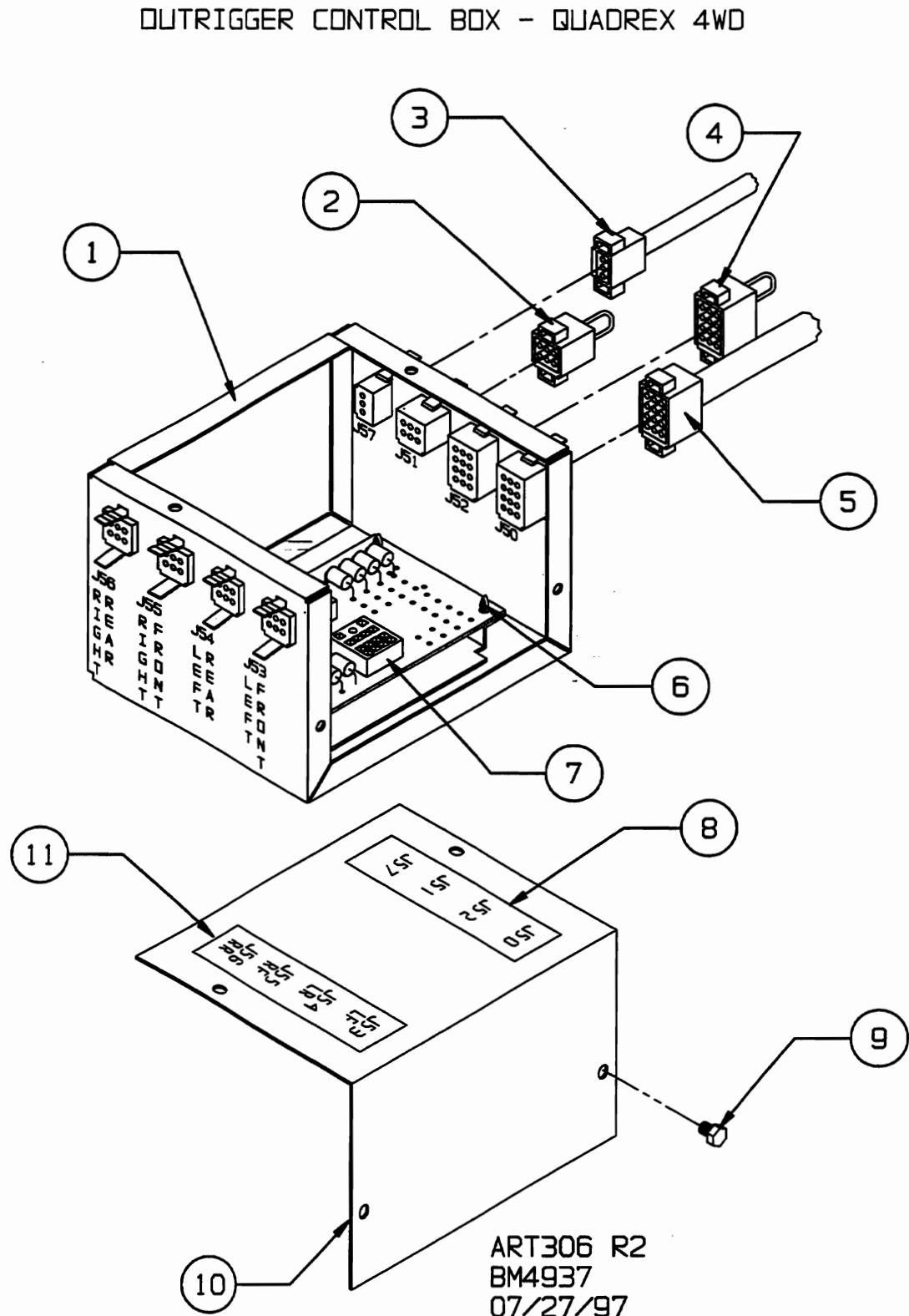
**Figure 8T - Outrigger Circuit Board Assembly**



## Figure 8T - Outrigger Circuit Board Assembly

ITEM	PART NO.	QTY.	DESCRIPTION
1	10467	1	CIRCUIT PANEL L.H.
2	9021	1	RELAY BOARD, SOLID STATE
	9065	SERV	ADAPTER HARNESS, OUTPUT
3	HDW7561	8	BTMCHTRUSSSLT #6 320.75ZSTLN
4	HDW8289	2	BTSTFHEX SLT #10 320.31YSTLY
5	6889 9278	1 1	POWER RELAY 12VOLT DC 25 AMP RELAY, 12VOLT, N/O WITH SUPPRESSION
6	HDW6455	1	BTTITETAP .250 200.50Z 5Y
7	8511	1	DECAL-CNTRL PNL OUTRIGGER AUX. J16, J18
8	8218	1	HARNESS, OUTRIGGER AUX. PNL
9	7235	1	CIRCUIT BREAKER-15 AMP MANUAL

ART307 R4  
BM4954  
6/9/98

**Figure 8U - Outrigger Base Control Box**

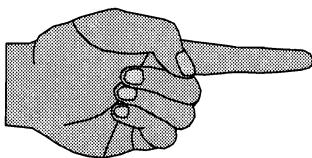
## Figure 8U - Outrigger Base Control Box

ITEM	PART NO.	QTY.	DESCRIPTION
1	10890	1	CONTROL BOX WELDMENT - ORIGINAL
2	8057	1	CONNECTOR JUMPER - 6 PIN
3	8054	1	WIRE HARNESS AUX TO MANIFOLD
4	8058	1	CONNECTOR ASS'Y - JUMPER
5	8219	1	HARNESS, OUTRIGGER INNER CNTRL
6	7883	4	SUPPORT, CIRCUIT BOARD - JS
7	8055	1	CIRCUIT BOARD OUTRIGGER
8	8510	1	DECAL-CNTRL BOX OUTER J50-J52, J57
9	HDW5636	4	BTMCHROUNDSLT #6 320.25ZSTLN
10	10877	1	COVER CONTROL BOX - OR
11	8509	1	DECAL-CONTROL BOX OUTRIG J53-J56

ART306 R2  
BM4937  
07/27/97



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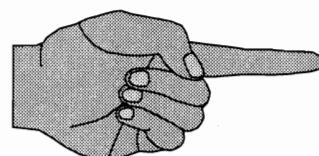


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**Decals**

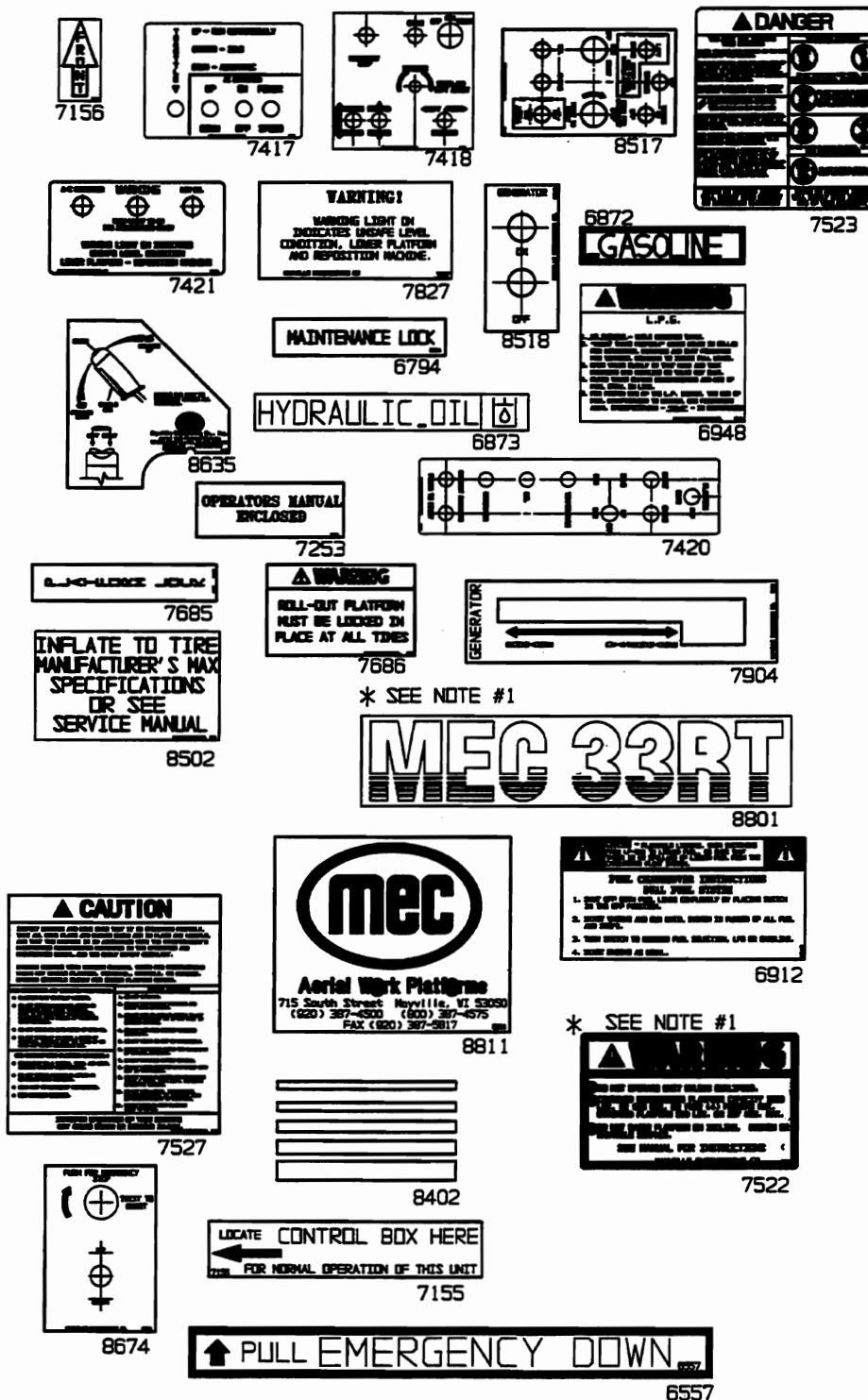


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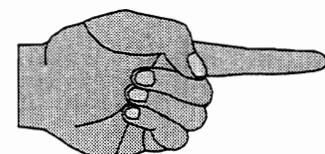
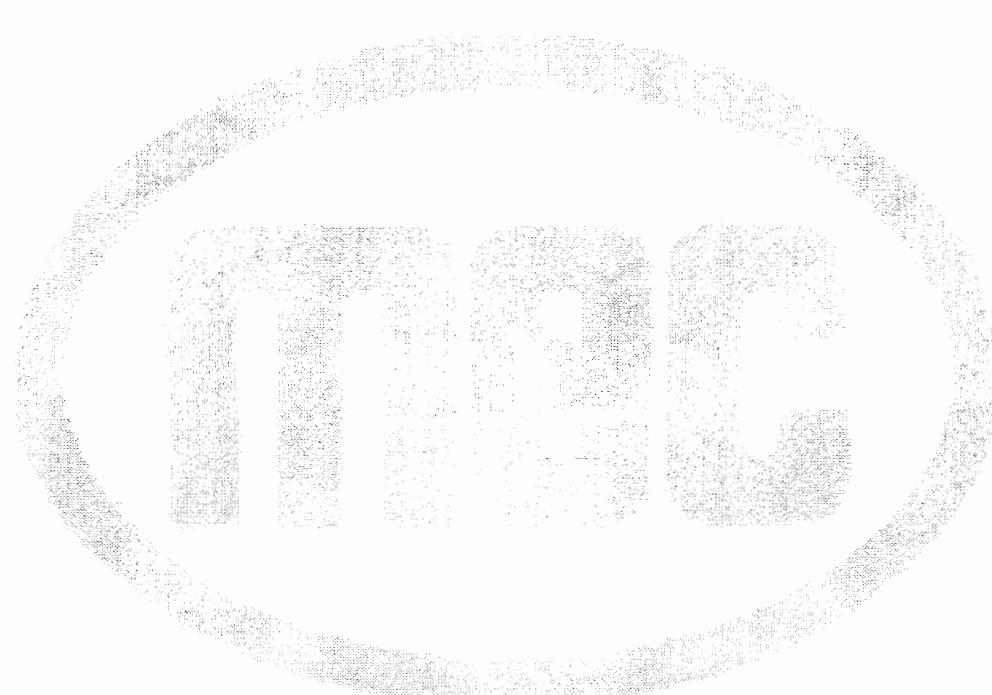
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## Figure 9A - Decals

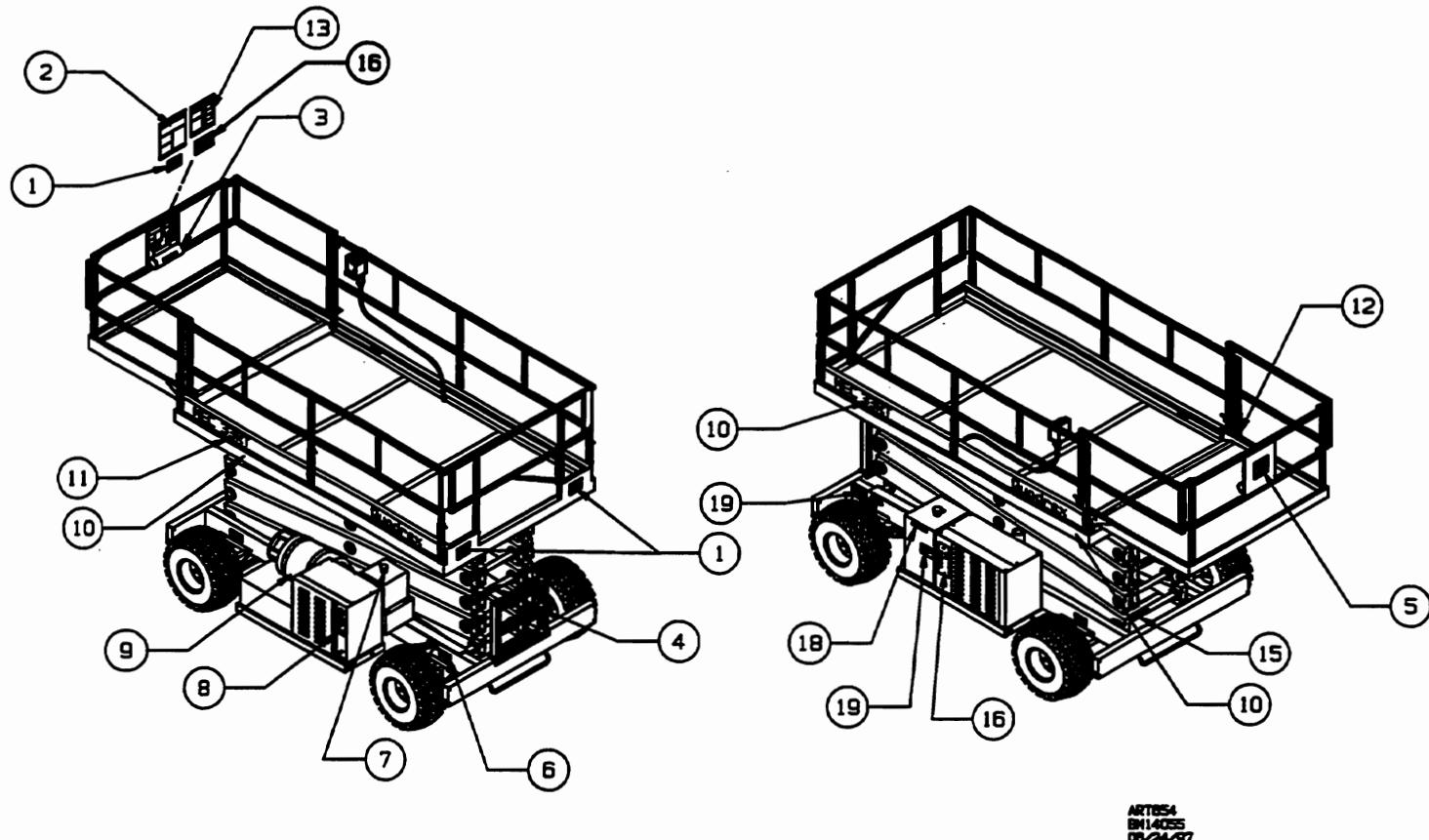


ART650  
BM14042  
07/27/97

# Notes:



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**Figure 9B - Decal Locations**

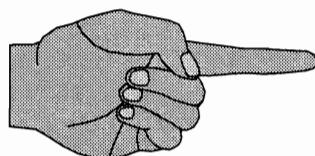
## Figure 9B - Decal Locations

ITEM	PART NO.	QTY.	DESCRIPTION
1	7522	3	DECAL-CAPACITY 1250#
2	7527	1	DECAL - CAUTION
3	7253	1	DECAL-MANUAL CASE
4	6794	2	MAINTENANCE LOCK
5	8811	1	DECAL LOGO
6	8502	4	DECAL-TIRE PRESSURE
7	6872	1	DECAL-GASOLINE
8	8674	1	DECAL - BASE LIFT CONTROL
9	6948	1	DECAL-LPG INSTRUCTION
10	8402	16ft	DECAL-RAIL STRIPE-SHIP 150' ROLL
11	8801	2	DECAL-MODEL NUMBER QUADREX 33RT
12	7685	2	DECAL-PLATFORM LOCK
13	7523	1	DECAL-CAUTION ELEC/TIP HAZARDS
14	7686	1	DECAL-LOCK WARNING
15	6557	1	DECAL-EMERGENCY DOWN
16	7420	1	DECAL-ENGINE COMPARTMENT
17	6912	1	DECAL-FUEL CHANGE OVER
18	6873	1	DECAL-HYDRAULIC FLUID
19	7237	1	SERIAL NUMBER PLATE-DYNA MITE

ART654  
BM14055  
06/24/97



# Notes:



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## **Limited Owner Warranty**

**Mayville Engineering Company, Inc. (MEC) warrants its equipment to the original purchaser against defects in material and/or workmanship under normal use and service for one (1) year from date of registered sale or date the unit left the factory if not registered.**

**MEC further warrants the structural weldments of the main frame and scissor arms as defined in MEC's current Warranty Policy & Procedures, to be free from defects in material or workmanship for five (5) years from date of registered sale or date unit left the factory if not registered. Excluded from such warranty is the battery(s) which carries a ninety (90) day warranty from described purchase date and prorated thereafter up to one (1) year.**

**Warranty claims within such warranty period shall be limited to repair or replacement, at MEC's option, of the defective part in question and labor to perform the necessary repair or replacement based on MEC's then current flat rate, provided the defective part in question is shipped prepaid to MEC and is found upon inspection by MEC to be defective in material and/or workmanship.**

**Mayville Engineering Company, Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever. Use of other than factory authorized parts; misuse, improper maintenance, or modification of the equipment voids this warranty.**

**The foregoing warranty is exclusive and in lieu of all other warranties, express or implied. All such other warranties, including implied warranties of merchantability and of fitness for a particular purpose, are hereby excluded.**

**No Dealer, Sales Representative, or other person purporting to act on behalf of MEC is authorized to alter the terms of this warranty, or in any manner assume on behalf of MEC any liability or obligation which exceeds MEC's obligations under this warranty.**





**Aerial Work Platforms**  
**Mayville Engineering Company, Inc.**

An Employee Owned Company

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