

# OWNERS MANUAL FOR THE:



WHEREVER YOU'RE HEADED

*Jet* CO'S WITH YOU ALL THE WAY!!!

SERIAL NUMBER: \_\_\_\_\_ MODEL NUMBER: \_\_\_\_\_

## CONTENTS:

- OPERATING PROCEDURES
- MAINTENANCE
- TROUBLESHOOTING

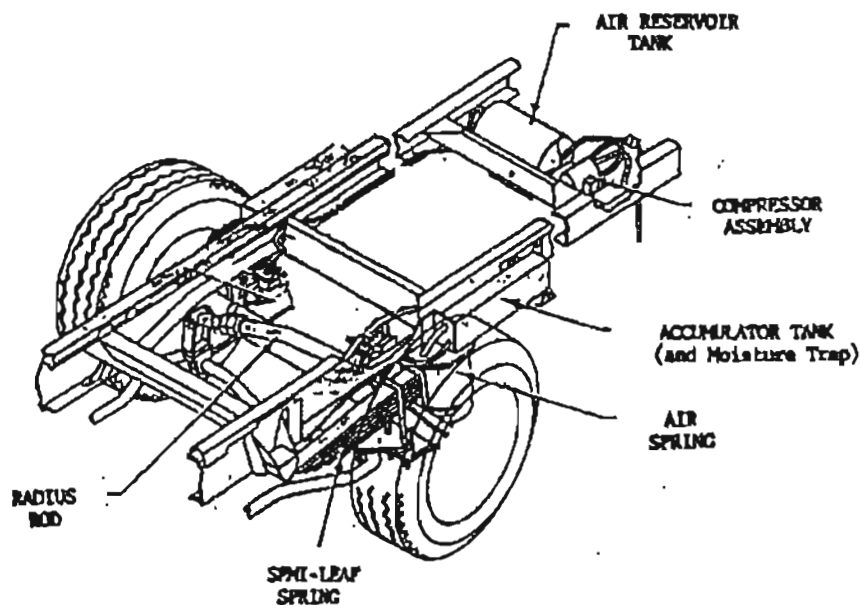
# OPERATION, MAINTENANCE, AND SERVICE OF THE JET AIR RIDE SUSPENSION SYSTEM, WITH OPTIONAL PARK AND LEVEL®

This information provides general operating, maintenance and troubleshooting guides for the Jet Air Ride Suspension System for your selected motor home.

We recommend that no repairs or maintenance be undertaken without prior knowledge of operating principles and proper diagnostic procedures of the system.

## SYSTEM COMPONENTS

The Jet Air Ride Suspension System basically consists of an air/leaf spring assembly, an air compressor unit with an air reservoir tank, individual air accumulator tanks, various height control valves and a pressure switch.



The spring assembly includes adjustable rubber air springs and auxiliary semi-leaf springs which completely replaced the original chassis rear suspension system. The height control valves continually monitor frame-to-axle distance to control the air volume in the air springs. This provides optimal spring pressure throughout a wider range of load conditions than a standard leaf spring rear suspension system, resulting in a smoother ride.

Although rubber air springs afford a softer ride, they do not provide much side-to-side stability. So, a large radius rod is mounted between the frame rails to recover the lateral stability lost by addition of the air springs. This combination actually delivers better ride and handling characteristics than the original leaf spring suspension system.

## OPTIONAL PARK AND LEVEL® SYSTEM

The optional Park and Level® system incorporates air distribution controls for vehicle leveling purposes. It allows air spring pressure to be individually controlled, either manually or automatically, to simulate the function of a hydraulic leveling system. This provides the vehicle owner with a reasonable degree of flexibility in parking or camping site selection.

### OPERATING INSTRUCTIONS

#### Normal Driving

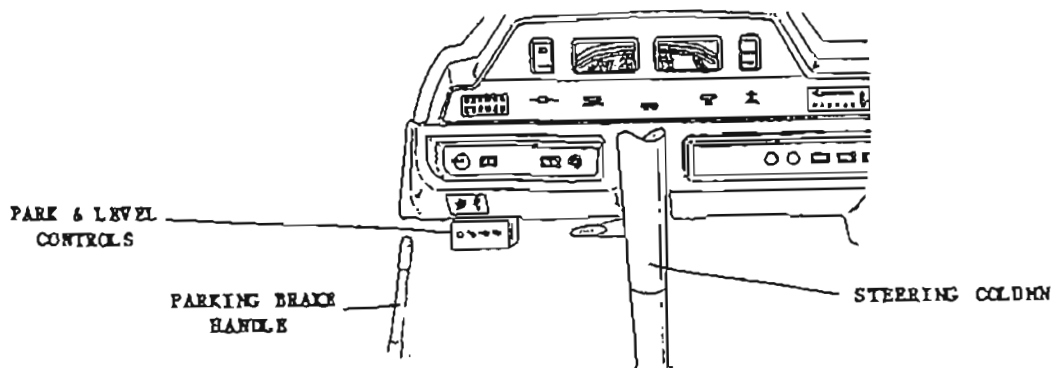
Without Park and Level® -- No special instructions or precautions must be observed since the system is always in road travel mode.

With Park and Level® -- The Auto/Manual switch should be placed in the Automatic (up) position before driving off. The switch handle emits a red light to alert the operator when the system is in the Park and Level® (Manual) mode.

NOTE: Automatic leveling (road travel mode) is deactivated when the ignition is switched off.

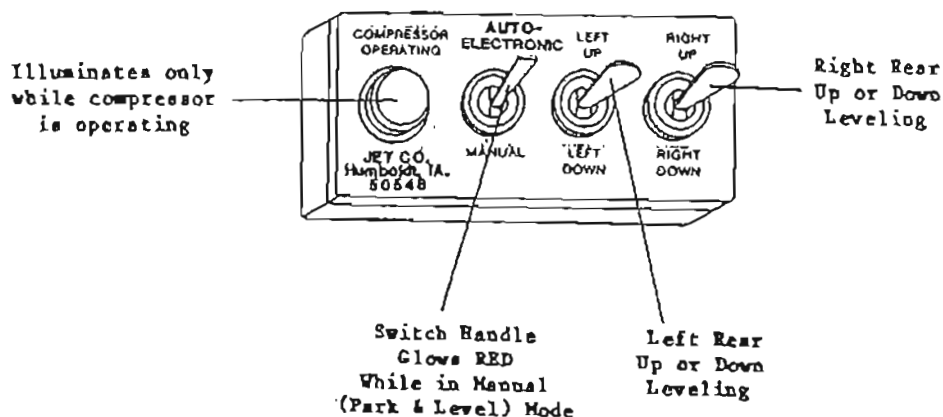
#### Park and Level® Controls

The optional Park and Level® control panel is located at the lower left-hand side of the dash. It contains 3 toggle switches and an indicator light.



## Leveling

Flip the mode switch (red toggle) to "Manual". The switch will illuminate to indicate that the leveling feature is activated. The vehicle may then be leveled by operating the right and left up/down switches.



- \* When raising the rear of the vehicle, operate both springs at the same time to provide maximum lifting power.
- \* When parked on a side hill, raise both springs as mentioned above, then lower the spring on the "uphill" side until the vehicle is level.
- \* When you're ready to drive off, flip the switch to Automatic. Coach will level for road use, by exhausting or inflating of air bags automatically. It will go through this leveling process 5-8 times before home is level.

## Compressor Light

The red indicator light labeled "Compressor Operating" will illuminate only while the compressor is operating. This normally occurs for a few minutes upon starting the vehicle after being parked while using the Park and Level® feature. The compressor will start when the Auto/Manual switch is placed back into the "Auto" position in order to build up air pressure in the springs. It will also operate periodically while driving to maintain air spring pressure.

If your compressor were to ever fail and your coach is equipped with the Park and Level® feature, by placing the coach into "Manual" position, air will be locked into the air bags. If another source of air is available, it can be hooked up to the schrader type valve located on the side closest to the frame rail, and again by placing the switch into "Manual" position to fill the bags. The coach will need to be left in "Manual" position until the compressor is repaired or replaced.

# PREVENTIVE MAINTENANCE

There are very few items on this suspension system that require periodic maintenance. Here are a few simple suggestions:

- > Purge moisture from air reserve tank periodically, before freezing temperatures, and vehicle storage. Turn the drain valve on the bottom of tank 90° to expel moisture. Close the valve when moisture stops.  
**CAUTION:** DO NOT position yourself or any person directly under valve when opening. Air and moisture will be expelled under pressure and may cause injury.
- > Purge moisture from accumulator tanks periodically, before freezing temperatures, and vehicle storage. Turn the drain valves on the bottom of tanks 90° to expel moisture. Close the valves when moisture stops.  
**CAUTION:** Only open drain valves on accumulator tanks for one second at a time. Motor home will lower down when valves are open. DO NOT position yourself or any person under motor home when opening these valves.
- > Periodically inspect air hoses and air bags for abrasions or other conditions which could result in air leaks.

## TROUBLESHOOTING THE JET AIR RIDE SUSPENSION SYSTEM WITH OPTIONAL PARK AND LEVEL

### (A) AIR COMPRESSOR WON'T RUN

Due to Electrical Troubles

1. Blown fuse - replace fuse
2. Improper ground - reconnect ground
3. Wiring improperly attached - see diagram A, check connections
4. Defective pressure switch (operates 90 psi to 120 psi) - Turn ignition switch and open drain valve on compressor air tank if compressor does not come on and power at top terminal on solenoid, put Auto/Manual switch to manual and see if red light in switch comes on; if no light - replace fuse for ignition switch; light - replace pressure switch
5. No power from solenoid - with ignition switch on and power on top terminal and terminal marked BAT on solenoid, check third terminal for power if none - replace solenoid
6. Power from solenoid - replace compressor

### (B) AIR COMPRESSOR WON'T SHUT OFF

1. Defective pressure switch - with ignition switch ON, remove wire from top terminal of solenoid. If solenoid turns off, reconnect and check air pressure in tank if it is over 120 psi - replace pressure switch
2. Defective solenoid - remove wire from top terminal of solenoid and compressor continues to run - replace solenoid
3. Air leaks - check all air connections in system with soapy water solution including air exhaust hoses - repair leaks or replace leaking parts - see diagram
4. Defective compressor - with ignition switch ON and Auto/Manual switch in manual check compressor for output of air by testing air pressure in air tank, no increase in pressure - replace or repair compressor

(C) VEHICLE WON'T AUTOMATICALLY LEVEL  
When equipped with Electronic Park and Level®

1. Ignition switch off - ignition switch must be on to supply power
2. Fuse blown - There are two fuses (1) 30 amps inline fuse from battery to compressor and (2) ignition wire fuse. To check for ignition wire fuse, turn ignition ON, put Auto/Manual switch in manual, no light in switch - replace fuse
3. Switch on control box in wrong position - switch must be in Auto
4. Adjusting link clamp moved on axle - turn ignition switch ON, Air bags should be at 11 inches, if not readjust the clamp on the axle by rotating to raise or down to lower. After making adjustment, let air out of bags till they reach 8 or 9 inches and put red toggle switch in Auto, bags should come back to 11 inches, if not readjust clamps and test again
5. Electronic height control box connector disconnected - reconnect
6. Electronic height control box not operating:
  - a. No power to box from harness - test between orange (12 volts positive) and brown (12 volts negative) wires for power at harness connector; then test between orange and brown wires approximately 1 inch on box side of connector - check contacts in all connectors, then reconnect
  - b. No power from electronic height control box to valve - test at connector on wires from box between red (down) or green (up) and brown on right side; between gray (down) or yellow (up) and brown on left side - replace electronic box
  - c. No power from box to valve - test wires from valves approximately 1 inch from connector - check contacts in connector and reconnect
7. Valves not operating:
  - a. Low voltage - test wiring from EHCS for 12 volts - start engine and operate system
  - b. No power - see items 6b and 6c
8. Pinched air lines - inspect and correct or re-route if necessary
9. Compressor not operating properly - see item A

(D) AIR SPRINGS WON'T MAINTAIN PROPER HEIGHT

1. P/L in improper mode - refer to installation/operating instructions
2. Air leaks - check entire system using soapy water solution
3. Defective or improperly adjusted electronic height control box - check box and re-adjust (see item C4) or replace as necessary
4. Compressor not operating properly - see item A
5. Air plumbing incorrect - refer to installation instructions

(E) PARK AND LEVEL® WON'T OPERATE

1. Ignition switch off - must be On to supply power
2. Fuse blown (see item C2) - replace fuse
3. Electrical connections unplugged - inspect and re-attach if necessary
4. Compressor not operating - see item A

(F) VEHICLE WON'T LEVEL IN MANUAL MODE

1. Ignition switch off - Must be on to supply power
2. Be sure red toggle switch is down in manual
3. Fuse blown - with ignition switch on and Auto/Manual switch in manual, the switch should have red light - no light (see item 2C)
4. Defective valve assembly - with ignition switch ON and Auto/Manual switch in manual:

- a. Move right or left switch up and down, see if you can hear click or put a piece of steel on top of the valve to check for magnetism while switch is moved up or down, if no click or magnetism, go to step 4b.
- b. No power to valve assembly - with right or left switch up or down, test at connector from box on right side - red (down) or green (up) and brown; left side - gray (down) or yellow (up) and brown - if power, test wires from valve approximately 1 inch from valve - if power, change valve assembly (if no power go to step 4c)
- c. If no power to valves - check contacts in connectors and reconnect

(G) NO INDICATOR LIGHTS ON PARK AND LEVEL® CONTROL PANEL

Compressor Operating Light Won't Come On

1. Ignition switch is turned On - ignition must be on to supply power
2. Be sure compressor is operating
3. Fuse blown - replace
4. Bulb burned out - with ignition switch on and compressor running, test for power between purple and brown wires at the connector under dash - if power, replace light (if no power, go to step G5)
5. Wire disconnected - check plugs and reconnect, if necessary

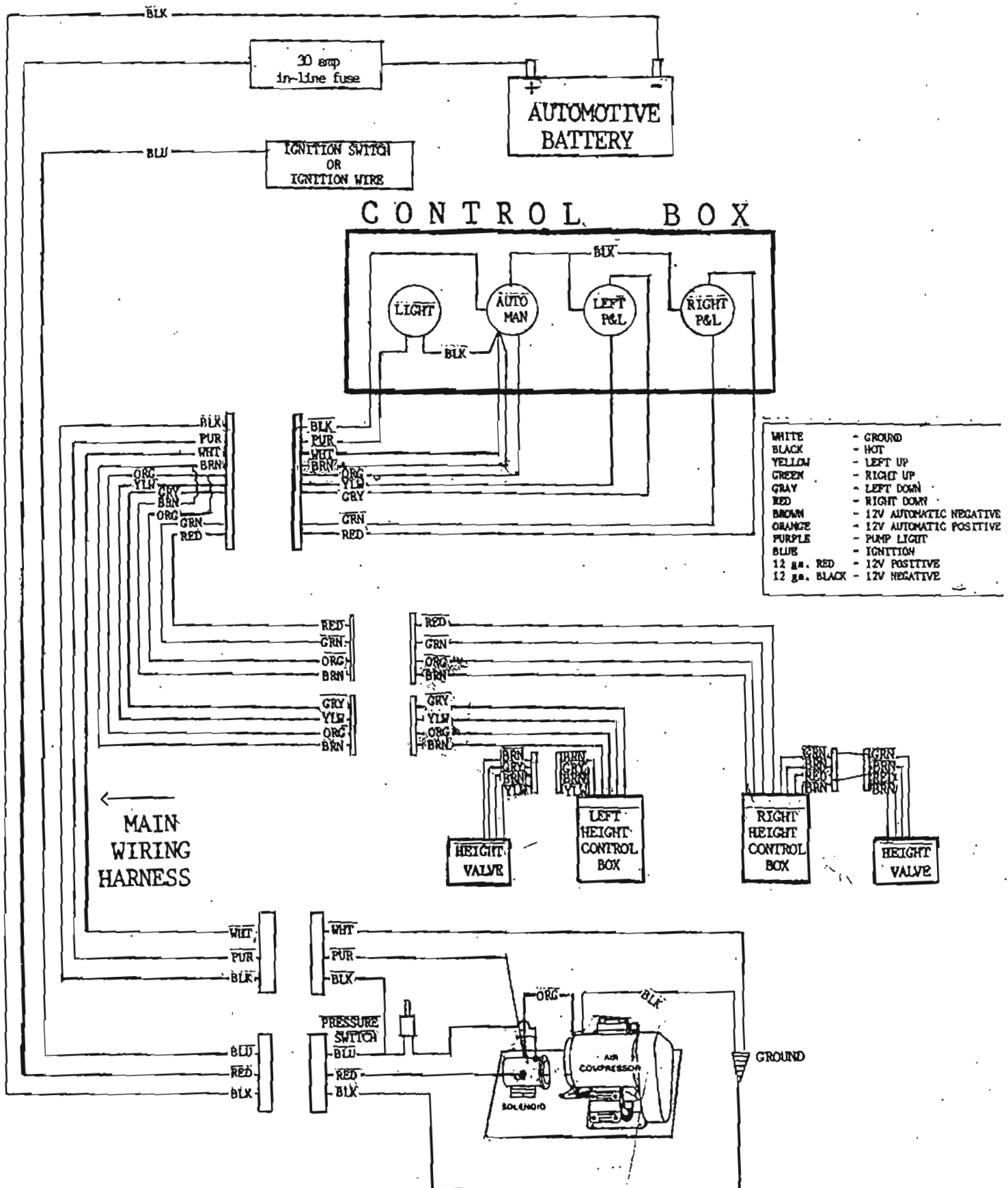
Auto/Manual Switch Handle Light Not Operating

1. Fuse Blown (see item G2)
2. Wire disconnected - with ignition switch on and Auto/Manual switch in manual, test for power in small black wire in connector under dash - if power, check contacts and reconnect.

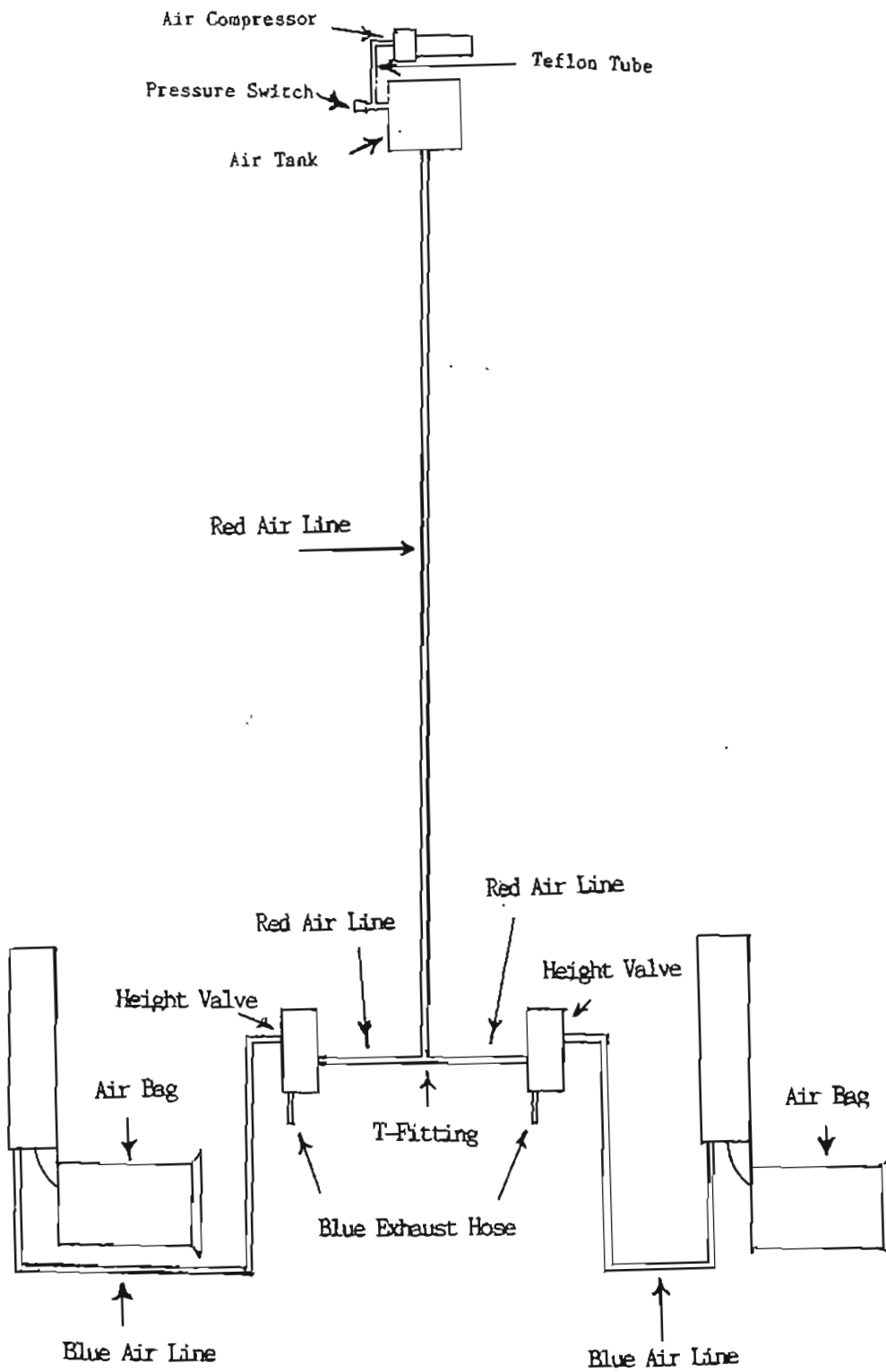
Technical Assistance:

Should you require assistance for problems beyond the steps listed in this bulletin, you may contact us in writing, Jet Company, 1303 N. 13th Street, Humboldt, Iowa 50548, or call (515) 332-3117 or 800-332-3117 between 8:00 AM and 4:30 PM Central time.

WIRING SCHEMATIC FOR JET AIR RIDE WITH ELECTRONIC PARK & LEVEL®







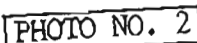
JET CO  
Humboldt, IA

Air Line Schematic,  
Jet Air Ride,  
Electronic

Front

PARTS LIST. P-30-93

PHOTO NO. 1



## ELECTRONIC PARK AND LEVEL

## PARTS LIST

PHOTO NUMBER 1

Qty.	Part #	Description	Qty.	Part #	Description
1	50700	Air Compressor Bracket	1	50723	Bushing, 3/8" X 1/8" Pipe
1	50701	Air Compressor	1	50724	Hex Reducing Nipple, 3/8" X 1/4"
1	50702	Electric Solenoid, w/sealant, w/waterprf. seal	1	50725	1/4" Pipe Tee, Black
1	50703	Air Tank	1	50726	1/4" Air Inlet
1	50704	Air Reservoir Tank Brackets	4	50727	#8 Washer SAE - Plated
2	50705	Air Reservoir Tank Clamps, 7 ga.	3	50728	1/4" Pipe to 1/4" Tube
5	50706	3/8" X 1 1/2" HxCapScrew, Pltd., Crs.Thrd., Gr #5	4	50729	3/8" X 1" HxCapScrew, Pltd., Crs.Thrd., Gr #5
5	50707	3/8" Self-lock nuts, pltd. nylon insert, crs.	1	50732	Air Pressure Switch
1	50708	5/16" X 1" Hx.Hd.Bolt, Plated Coarse	1	50739	1/4" X 1/8" Barbed Elbow
1	50709	5/16" Lock Nut Nylon Insert Coarse, PL	1	50741	Street-T, FPT to MPT to Tube
4	50710	#8 3/4" Tex Plated Coarse	1	50742	5/16" Flatwasher Plated
1	50711	Loom Clamp (Wire)	1	50748	1/4" X 1/8" Straight Hose Barb
8	50713	7/32" Black Rubber Hose	3	50798	3/16" X 1" Hx.Hd.Bolt, Plated Coarse
1	50715	8 1/2" O.D. Teflon Tubing (1/4")	3	50806	3/16" Lock Nut, Plated
6	50718	Insulated Ring Terminal	3	50816	3/16" Flat Washer, Plated
1	50719	Ring Terminals	1	50822	External Air Filter
3	50720	Pit Cock	1	50851	Compressor Mounting Plate
1	50721	1/8" Clos Nipple, Brass	1	50852	Electronic Compressor Harness
1	50722	Check Valve			

PHOTO NUMBER 2

Qty.	Part #	Description	Qty.	Part #	Description
4	50710	#8 3/4" Tex Plated Coarse	1	50768	Radius Rod End (Adjustable End)
3	50720	Pit Cock	2	50769	1 1/2" Nut Fine Thread
	50727		1	50770	Radius Rod End
3	50728	1/4" Pipe to 1/4" Tube	8	50771	1/2" X 1 1/2" Hardened Bolt, Plated Coarse
4	50729	3/8" X 1" HxCapScrew, Pltd., Crs.Thrd., Gr #5	8	50772	1/2" Self-lock nuts, pltd., Crs.-no nylon insert
1	50733	Fuse Holder	4	50773	3/8" Lock Washer, Plated
1	50750	Left Top Spring Holder	1	50774	Indicator Light
1	50751	Right Top Spring Holder	1	50775	McGill Lighted Switch
2	50752	Super Cushion Air Bag, w/bumper	2	50776	McGill Switch
1	50753	Left Spring Holder (Lower)	3	50777	McGill Nut for Toggle Switch
1	50754	Right Spring Holder (Lower)	1	50778	Dash Park and Level Control Box
4	50755	3/4" Pipe, 3/4" Hose	1	50779	Park and Level Mounting Bracket
4	50756	Hose Clamp	2	50780	8-32 X 1/4" Mac. Screw, Hx.Hd., Plated Crs
11 1/2	50757	5-5/8" X 3/4" Air Hose	1	50783	Left Height Control Box
2	50758	7/8" X 13-1/2" U-Bolt (Bent)	1	50784	Right Height Control Box
2	50759	7/8" X 13-1/2" U-Bolt (Straight)	1	50785	Left Valve
8	50760	7/8" NF Long Nuts (U-Bolts)(High), Pltd.fine	1	50786	Right Valve
8	50761	7/8" Flat Washers, Pltd. (1-3/4" O.D.-SAE)	10	50787	1/4" Self-lock nuts, pltd.crs., nylon insert
2	50762	1/2" Leaf Springs	6	50788	1/4" X 2" Hx.Hd.Bolt, pltd., thrd.all way, cr
1	50763	Electronic Wiring Harness	2	50789	1/2" X 3" Bolt, Plated, Gr #5, Coarse
2	50764	1/2" Lock Washer, Plated	8	50790	1/4" X 1" Bolt, Plated, Coarse
2	50765	Radius Rod Brackets	2	50791	4" Clamps (Axle)
2	50766	7/8" X 5" Fine Thread Bolt	2	50792	Linkage Arm
2	50767	7/8" Self-lock nuts, fine thrd, pltd.plst.insert			