

# **ATTENTION!!**

## **DO NOT OPERATE 24 VOLT COMPRESSOR WITHOUT REVIEWING THE FOLLOWING INSTRUCTIONS**

- 1. REVIEW SAMPLE DIAGRAM AND READ ALL INSTRUCTIONS BEFORE INSTALLING AND OPERATING THE COMPRESSOR**
- 2. REMOVE PLASTIC BAG COVERING AIR FILTER AND DISCARD**
- 3. YOUR WIRING MUST BE ABLE TO OPERATE A MINIMUM 40 AMPS CONTINUOUSLY**
- 4. YOU MUST USE A RELAY CAPABLE OF AT LEAST 40 AMPS CONTINUOUSLY**
- 5. ALWAYS USE A SEPARATE FUSE OR CIRCUIT BREAKER AT THE BATTERY TO PROTECT YOUR WIRING (MINIMUM OF 40 AMPS). THE INCLUDED CIRCUIT BREAKER ON THE COMPRESSORS POSITIVE LEAD PROTECTS THE MOTOR FROM OVER-AMPERAGE. DO NOT REMOVE!**
- 6. DO NOT SUBMERGE YOUR COMPRESSOR IN WATER**
- 7. NEVER OPERATE YOUR COMPRESSOR INSIDE A CLOSED BOX WITHOUT VENTILATION. IT WILL OVERHEAT!!**
- 8. CYLINDER HEAD AND FITTINGS WILL BECOME VERY HOT DURING USE. DO NOT TOUCH COMPRESSOR OR FITTINGS WITHOUT PROPER PROTECTION. ALWAYS WEAR EYE PROTECTION WHEN USING COMPRESSED AIR.**
- 9. WHEN USING AN AIR TANK, YOU MUST INSTALL A ONE WAY CHECK VALVE DIRECTLY INTO THE CYLINDER HEAD OUTLET.**

## **ATTENTION!!! IMPORTANT INSTRUCTIONS**

YOUR COMPRESSOR IS A HIGH AMPERAGE 24 VOLT MOTOR. IT IS IMPORTANT THAT YOUR WIRING AND ELECTRICAL SYSTEM IS DESIGNED TO CONTINUOUSLY RUN A MINIMUM OF 40 AMPS. IF THE COMPRESSOR IS MOUNTED WITHIN 5 FEET (1.5 METERS) OF THE BATTERY, THEN 10 GAUGE WIRE AND GROUND STRAP ARE ACCEPTABLE.

**FOR DISTANCES GREATER THAN 10 FEET, USE MINIMUM 6 GAUGE WIRE.**

IT IS VERY IMPORTANT THAT THE COMPRESSOR HAS A GOOD GROUND. CHECKING WITH A VOLT METER OR TEST LIGHT ONLY SHOWS VOLTAGE, NOT AMPS AVAILABLE. (YOU MAY SHOW 24 PLUS VOLTS, BUT YOU CAN ONLY SUPPORT A COUPLE OF AMPS) THE COMPRESSOR CAN BE GROUNDED AT ITS MOUNTING LOCATION WITHOUT RUNNING A GROUND STRAP BACK TO THE NEGATIVE TERMINAL OF THE BATTERY. IF GROUNDING AT MOUNTING LOCATION, BE SURE THE LOCATION HAS A GOOD GROUND. INNER FENDER LINERS, FIBERGLASS BODIES, TRAILERS, MOTORHOMES, STORAGE/TOOL BOXES, FLATBEDS AND UTILITY TRAYS HAVE VERY WEAK GROUNDING. IF IN DOUBT, RUN A GROUND STRAP TO THE VEHICLES FRAME OR BACK TO THE NEGATIVE TERMINAL OF THE BATTERY.

**FAILURE TO DO SO WILL DAMAGE THE COMPRESSOR MOTOR AND IS NOT COVERED UNDER WARRANTY.**

THE COMPRESSOR MUST BE USED WITH A HEAVY DUTY RELAY CAPABLE OF AT LEAST 40 AMPS CONTINUOUS USE. TO PROTECT THE WIRING YOU MUST ALSO USE A FUSE OR CIRCUIT BREAKER WITH A MINIMUM OF 40 AMPS CAPABILITY.

DO NOT RUN THE COMPRESSOR USING JUST A TOGGLE SWITCH TO CONTROL THE ELECTRICAL FLOW. TOGGLE SWITCHES CREATE TOO MUCH RESISTANCE AND HEAT. THIS WILL LIMIT THE AMPERAGE AND WILL DAMAGE YOUR COMPRESSOR MOTOR. **YOU MUST RUN A HEAVY DUTY RELAY AND**

**FUSE SYSTEM/CIRCUIT BREAKER OR YOUR WARRANTY IS VOID.**

WHEN RUNNING THE COMPRESSOR, REMEMBER THE AIR MOLECULES THAT ARE BEING COMPRESSED MUST HAVE SOMEWHERE GO. IF YOU ARE NOT USING AN AIR TANK AND PRESSURE SWITCH TO MAKE A CLOSED LOOP SYSTEM, THEN YOU MUST USE A FLOW THROUGH AIR CHUCK TO RELIEVE PRESSURE AS THE COMPRESSOR IS RUNNING. WHEN USING A FLOW THROUGH AIR CHUCK, AIR CONTINUALLY FLOWS OUT OF THE AIR CHUCK UNTIL IT IS ATTACHED TO THE TIRES VALVE STEM. THE FLOW THROUGH AIR CHUCK SYSTEM MAKES FOR A GOOD BASIC AND SIMPLE SET UP.

IF YOU ARE INSTALLING A CLOSED LOOP SYSTEM WITH AN AIR TANK AND PRESSURE SWITCH, YOU MUST INSTALL A CHECK VALVE IN THE CYLINDER HEAD.

THE COMPRESSOR IS NOT DESIGNED TO HOLD CYLINDER HEAD PRESSURE. THE CHECK VALVE KEEPS ALL STORED AIR IN THE AIR TANK SYSTEM UNTIL NEEDED FOR USE. YOU MAY INSTALL A 90 DEGREE ELBOW FIRST TO HELP FACILITATE AIR HOSE ROUTING. ARROW ON CHECK VALVE SHOWS THE DIRECTION OF AIR FLOW.

DO NOT INSTALL BACKWARDS!

**USING THE COMPRESSOR WITHOUT A CHECK VALVE IN A CLOSED LOOP AIR TANK SYSTEM WILL VOID THE WARRANTY.**

**THE PRESSURE SWITCH MUST BE INSTALLED AFTER THE CHECK VALVE. THE PREFERRED LOCATION IS IN THE AIR TANK OR AIR MANIFOLD.**

**IF USING A SAFETY BLOW OFF VALVE, IT MUST BE INSTALLED AFTER THE CHECK VALVE. THE PREFERRED LOCATION IS ALSO IN THE AIR TANK OR AIR MANIFOLD.**

**ALWAYS USE THREAD SEALANT TO AVOID AIR LEAKS WHEN CONNECTING AIR HOSES AND FITTINGS.**

**LIQUID THREAD SEALANTS HAVE PROVEN MUCH MORE EFFECTIVE THAN TEFLON TAPE. ONCE YOUR SYSTEM IS COMPLETELY INSTALLED, PRESSURIZE TANK TO PRESSURE SWITCH SETTING AND SPRAY SOAPY WATER ON ALL FITTINGS AND TANK PORTS. BUBBLES INDICATE LEAKS AND NEED TO BE ADDRESSED.**

**YOUR COMPRESSOR CAN BE MOUNTED IN ANY POSITION OR ANGLE. ALL BEARINGS ARE SEALED. OTHER THAN ROUTINE FILTER CLEANING, NO OTHER SERVICE SHOULD BE REQUIRED.**

## **FILTER OPTIONS AND CARE INTRUCTIONS**

**YOUR COMPRESSOR CAN BE FITTED WITH EITHER A REUSABLE FOAM UNI-FILTER OR STEEL FILTER HOUSING WITH REPLACEABLE ELEMENT. PLEASE REVIEW THE FOLLOWING INSTRUCTIONS.**

### **UNI FILTER INSTUCTIONS**

THE COMPRESSOR IS FITTED WITH A WASHABLE AND REUSEABLE FILTER MADE IN THE USA BY UNI FILTER. YOUR COMPRESSOR FILTER IS PREOILED AND READY FOR USE. REMOVE PLASTIC BAG COVERING FILTER AND DISCARD. THE FILTER IS DESIGNED TO HOLD AND TRAP DIRT, DUST, SAND AND DEBRIS. REMEMBER, SURFACE DIRT IS NOT A SIGN THAT THE FILTER IS DIRTY. THE FILTER NEEDS TO BE CLEANED AND RE-OILED WHEN IT IS NO LONGER "WET" WITH OIL WHEN TOUCHED. CHECK THE FILTER EVERY TIME YOU CHANGE YOUR VEHICLES OIL.

### **CLEANING INSTRUCTIONS**

GREASE CUTTING CLEANER IS NECESSARY FOR PROPER CLEANING!! REMOVE FILTER FROM COMPRESSOR AND SPRAY GENEROUS AMOUNTS OF UNI CLEANER ON THE OUTSIDE AND INSIDE OF FILTER. IF UNI CLEANER IS NOT AVAILABLE; PRODUCTS LIKE SIMPLE GREEN, DISH SOAP OR MILD SOLVANTS CAN BE USED. LET SOAK APPROXIMATELY 3-4 MINUTES. RINSE OUT FILTER ELEMENT IN WARM WATER UNTIL CLEAN. A SECOND APPLICATION FOR HEAVILY SOILED ELEMENTS MAY BE NECESSARY.

NEXT YOU MUST LET THE FILTER COMPLETELY DRY. DO NOT USE COMPRESSED AIR AS THIS MAY DAMAGE THE FILTER. **VERY IMPORTANT!!** FAILURE TO DRY COMPLETELY WILL INTRODUCE WATER INTO THE CRANKCASE OF THE COMPRESSOR AND DESTROY THE BEARINGS.

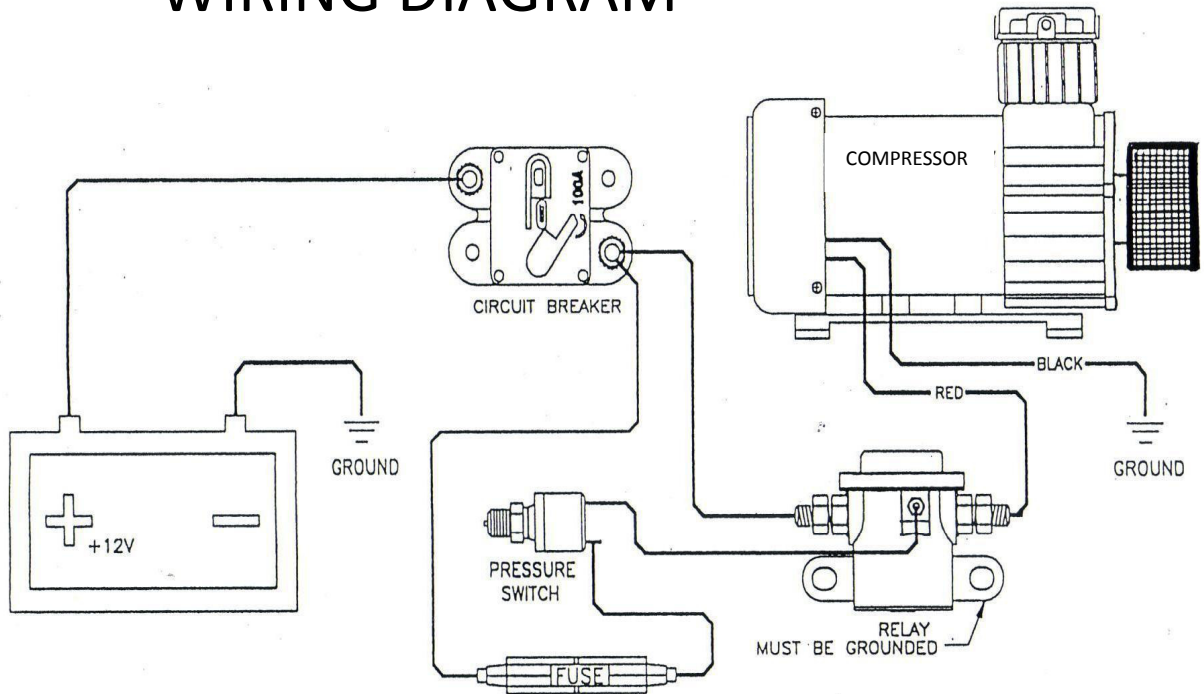
### **RE-OIL INSTRUCTIONS**

UNI FILTER OILING INSTRUCTIONS: USE UNI FILTER AEROSOL SPRAY. IF UNI FILTER OIL IS NOT AVAILABLE, FILTER OILS FROM NAME BRAND MANUFACTURERS CAN BE USED. FILTER OILS ARE AVAILABLE AT MOST MOTORCYCLE SHOPS. SPRAY THE FILTER INSIDE AND OUT UNTIL THE FILTER HAS COMPLETE COVERAGE WITH OIL. NEXT, WORK THE OIL INTO THE FILTER USING YOUR HANDS. REPEAT THIS STEP ONCE MORE, AND THEN DAB THE FILTER WITH PAPER TOWELS TO REMOVE EXCESS OIL. RE-INSTALL FILTER ON THE COMPRESSOR.

### **STEEL FILTER INSTRUCTIONS**

INSTALL THE AIR FILTER INTO THE BACK OF THE COMPRESSOR FILTER PLATE AND TIGHTEN WITH A 7/8" WRENCH. WHEN INSTALLING THE AIR FILTER, CLOCK THE HOUSING SO THE AIR INTAKE TUBE IS ALWAYS POINTING DOWN TOWARDS THE GROUND. THE FILTER ELEMENT IS REPLACEABLE ONLY, DO NOT CLEAN. TO REPLACE THE ELEMENT, GRAB THE HOUSING, PUSH INWARD AND TURN IN A CLOCKWISE DIRECTION TO REMOVE THE BACK HALF OF THE HOUSING. DISCARD DIRTY ELEMENT AND REPLACE WITH A NEW ELEMENT. RE-INSTALL IN REVERSE ORDER.

# WIRING DIAGRAM



\*Always use a circuit breaker or at least a fuse of 60 amps

\*An on/off toggle switch is recommended in line with the pressure switch. The compressor can be manually turned off if the system ever develops a leak or the vehicle is left unattended.

\* If not using a pressure switch, install the toggle switch to turn relay on and off. The ignition "on" wire would be a good choice for power so the compressor will run only if the vehicles motor is running.

\*For electrical hook up to the battery of less than 2 feet, 10 gauge wires are sufficient. For longer runs, use heavier gauge wire to avoid current loss and damage to motor.