

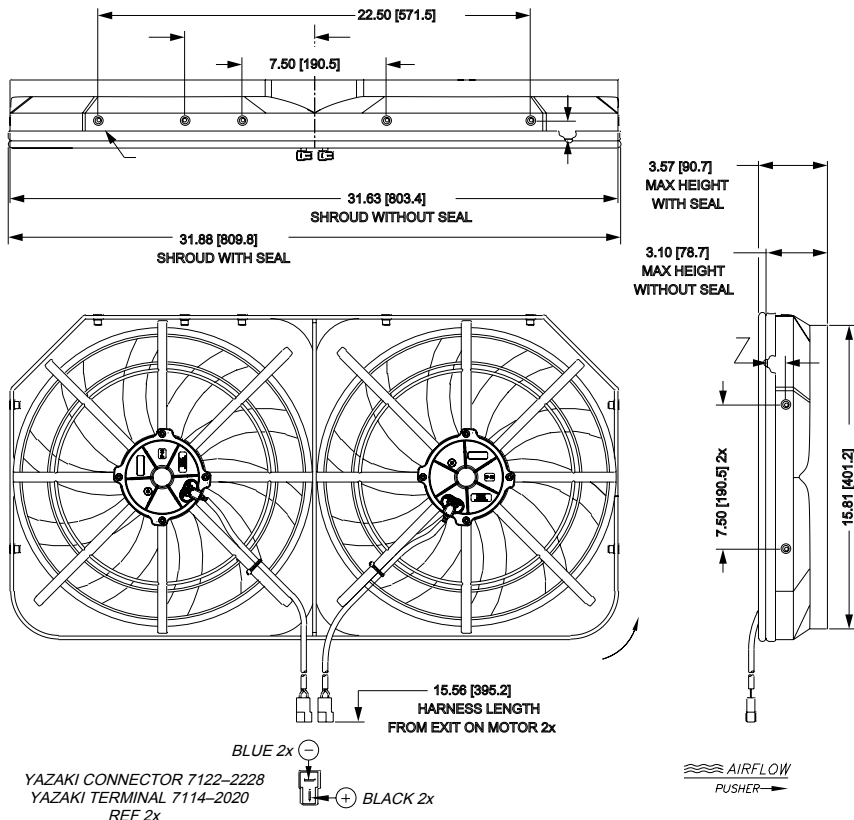
MM22KX 4,320 CFM

Dual Shrouded 16" Mach Two Extreme

Motor: (2) 12V 225W Direction: Pusher/Puller Blade: S-Blade
Width: 33.5" Height: 17" Depth: 3.98"
Amps: 36.0



(800) 403-7953 • www.MaradyneHP.com



MACH DUAL SHROUDED FAN

INCREASED AIRFLOW

Rubber Seal Eliminates Vibration and Increases Airflow

QUIET S-BLADE DESIGN

Works as a Pusher/Puller

INDUSTRY LEADING PERFORMANCE

Dynamically Balanced to Provide Smooth Performance & Low Noise

LONG LIFE MOTOR

Waterproof & Dustproof (IP68) for Extreme Environments

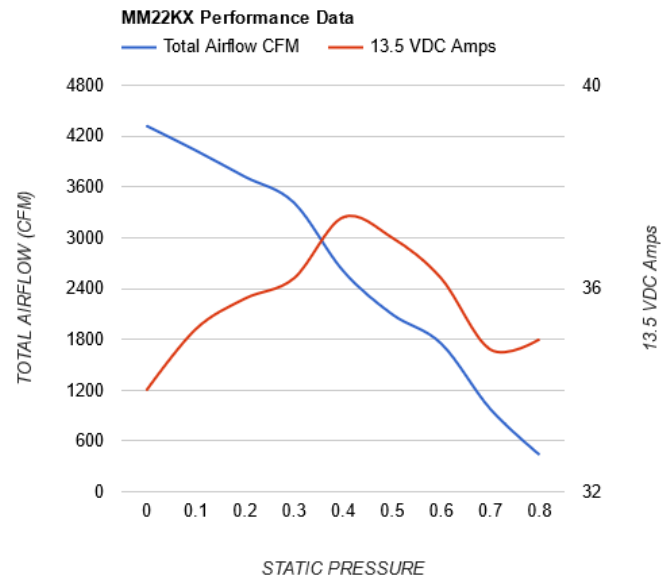
SUPERIOR QUALITY

Long Life Limited 3 Year Warranty

TYPICAL PERFORMANCE DATA

MM22KX DUAL 16" LP PUSHER MACH 12V 225W

STATIC IN H ₂ O	TOTAL FLOW CFM	AMPS
0	4320	34
0.1	4030	35.2
0.2	3720	35.8
0.3	3414	36.2
0.4	2610	37.4
0.5	2096	37
0.6	1750	36.2
0.7	978	34.8
0.8	438	35



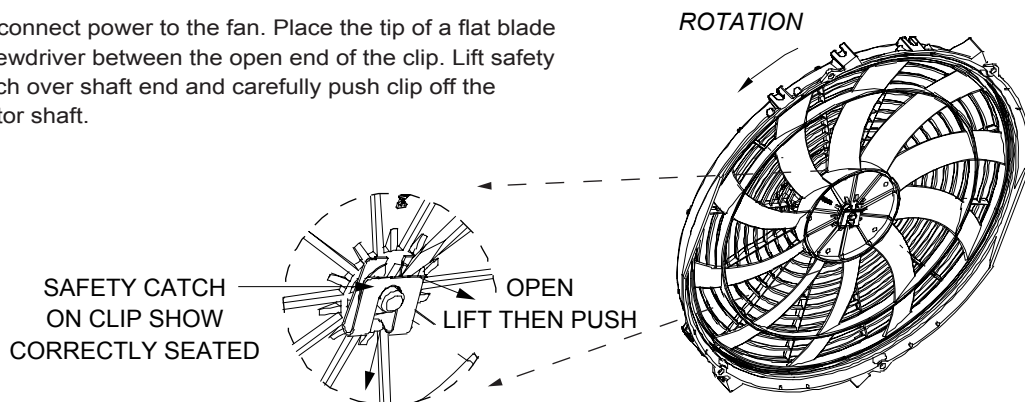
BLADE REVERSING INSTRUCTIONS

FANS SHIP IN PUSHER CONFIGURATION



**FOLLOW INSTRUCTIONS CAREFULLY TO PREVENT PERSONAL INJURY AND/OR DAMAGE TO THE FAN UNIT OR COMPONENT!
ALWAYS DISCONNECT ONE OF THE BATTERY CABLES OR REMOVE POWER FUSES FOR A CIRCUIT WHEN INSTALLING AN ELECTRICAL FAN OR COMPONENT!**

STEP 1: Disconnect power to the fan. Place the tip of a flat blade screwdriver between the open end of the clip. Lift safety catch over shaft end and carefully push clip off the motor shaft.

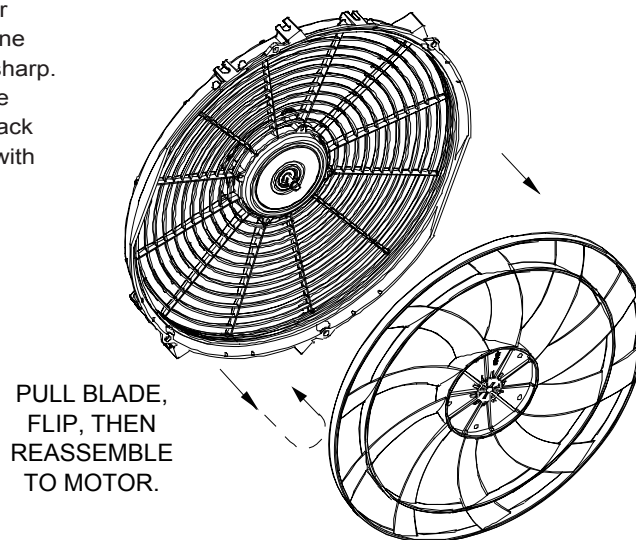


PUSHER CONFIGURATION

WIRING:

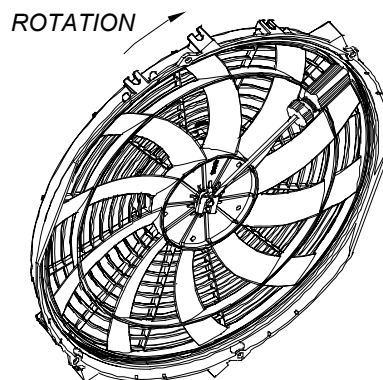
BLACK (+) POS
BLUE (-) NEG

STEP 2: With another person, carefully pull the blade off the motor shaft. We recommend one person hold the shroud and one person pull the blade. Caution – edges of the blade are sharp. Do not drive the motor out by impact. This will destroy the motor and void the warranty. Flip the blade, then place back on motor shaft by lining up the groove on the blade hub with the drive pin on the motor shaft.



STEP 3: Replace clip by pushing clip into groove on motor shaft. Ensure safety catch snaps over the motor shaft.

NOTE: Fan wiring changes to BLUE (+) POS and BLACK (-) NEG.



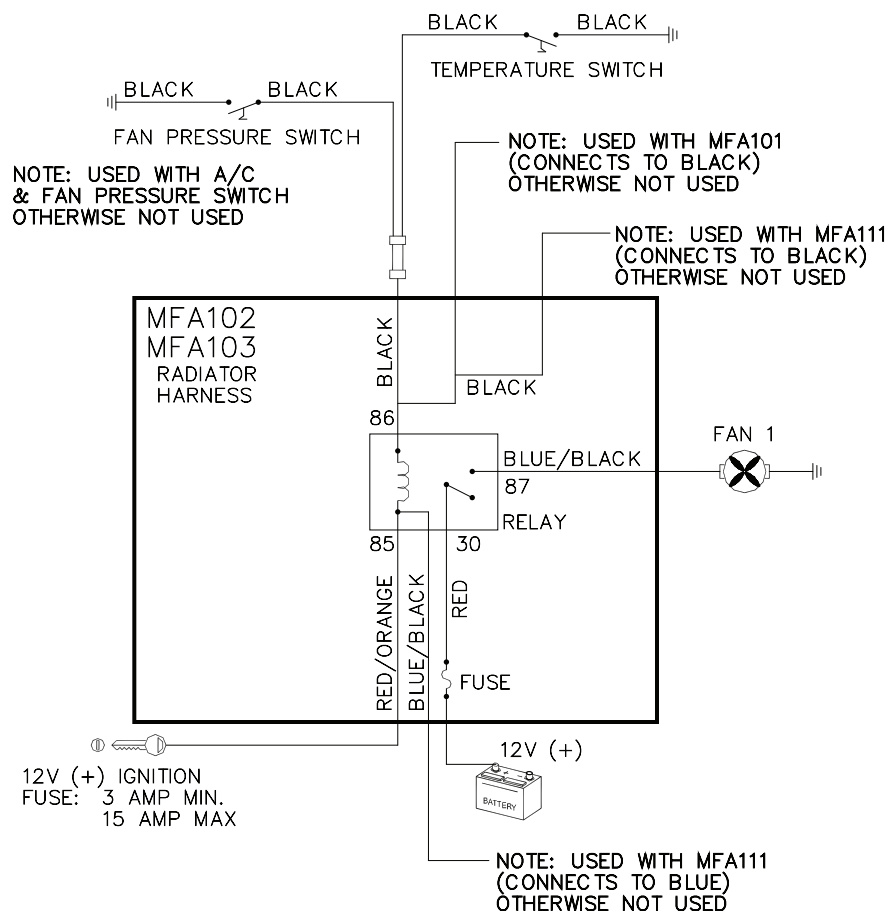
PULLER CONFIGURATION

WIRING:

BLUE (+) POS
BLACK (-) NEG

TYPICAL WIRING DIAGRAM

MFA102 & MFA103



Instructions for Use of MARADYNE® Fan Wiring Kits



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General: MARADYNE® uses only high quality wiring kits, using only premium SAE GXL wire & sealed fuse holders. The relay holders of the harnesses slide together; and the harnesses interconnect with “bullet” terminals for a neat, professional appearance. The installer assumes responsibility to replace the 30 amp fuses supplied, with those recommended by the fan manufacturer for each application. MARADYNE® provides fuse recommendations with each fan. It is the installer’s responsibility to secure the wiring away from high temperatures, areas where the insulation may be cut and to insulate any wire connections left exposed at completion.

RADIATOR FAN HARNESSES

These are all the same wire harness. Part Number varies due to the temperature switch supplied. (Only one **MFA100**, **MFA102** or **MFA103** will be used)

MFA100 has an adjustable thermostat with remote sensing bulb. The thermostat may be adjusted to engage at any temperature from 32°F to 248°F. The bulb is normally inserted into the radiator fins on the inlet water side. It must fit securely, and should be inserted close to the radiator tank. For consistent operation, the sensing bulb should not be in an area of high airflow. The installer may make a pilot hole thru the radiator fins using a #1 or #2 screwdriver, however care must be used to avoid damaging the radiator tubes.

MFA102 has a nominal setting of 185°F ON and 170°F OFF. This switch is identified by BLACK color code.

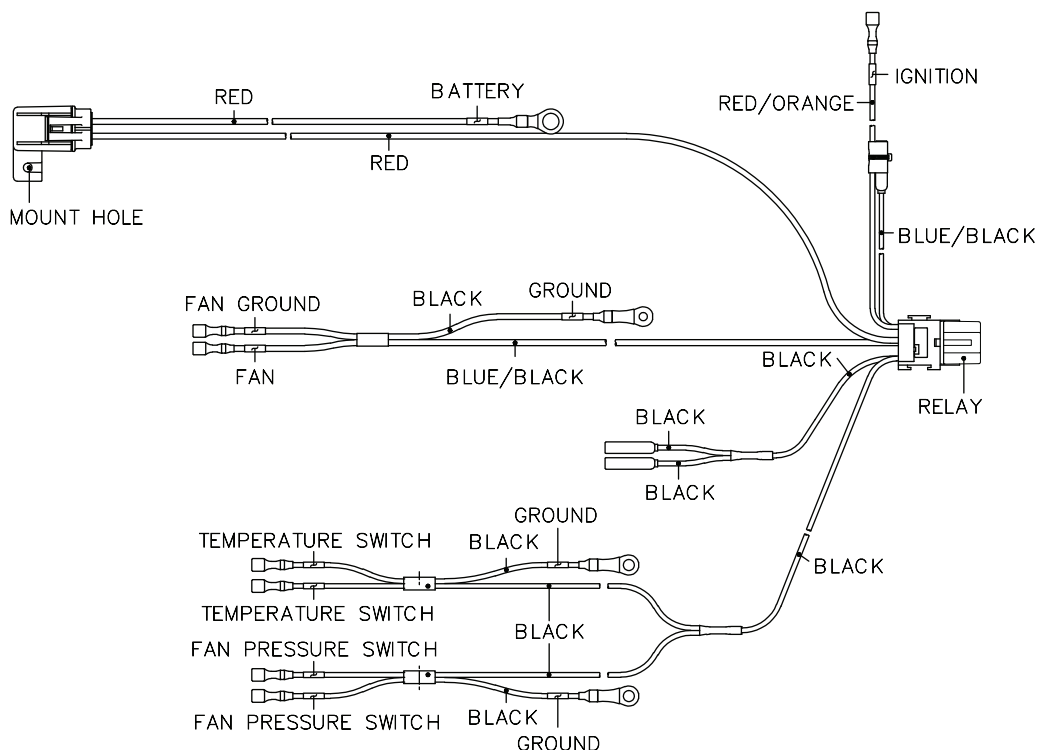
MFA103 has a nominal setting of 200°F ON and 185°F OFF. This switch is identified by RED color code.

These harnesses have a circuit in parallel with the TEMP SWITCH’ labeled ‘FAN SWITCH’. This connects to a fan pressure [2 wire] or Trinary [4 wire] switch, which is either standard or optional on many aftermarket A/C kits. This is the most efficient method to control a fan in A/C mode, engaging it only when the fan is required to lower the discharge pressure.

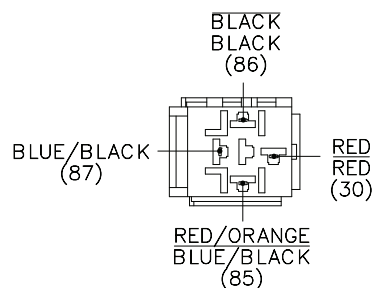
MARADYNE® does not sell these pressure switches. For racing applications, where it is desired to manually engage the fans, a toggle switch may be mounted within the passenger compartment and connected to the ‘Fan Switch’ terminals.

Both **MFA102** and **MFA103** have an internally grounding 3/8" male pipe thread temperature switch. This switch normally screws into the intake manifold, or in some cases the thermostat housing. When mounted in any location on the engine side of the thermostat, the temperature switch must engage the fan at a higher temperature than the opening temperature of the engine thermostat to prevent the fan(s) running full time. In some instances, it may be inserted into the inlet water tank of the radiator.

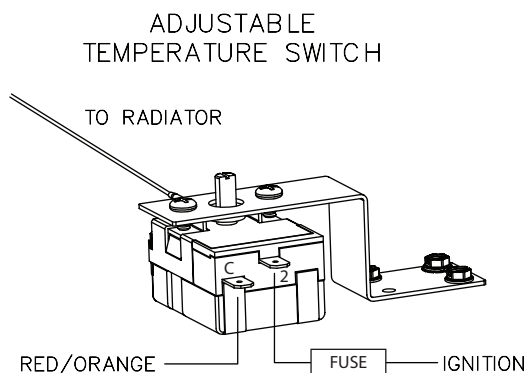
NOTE: Before grounding any electrical circuit thru a radiator, the manufacturer should be consulted.



WIRE LOCATIONS
(RELAY NOT SHOWN)

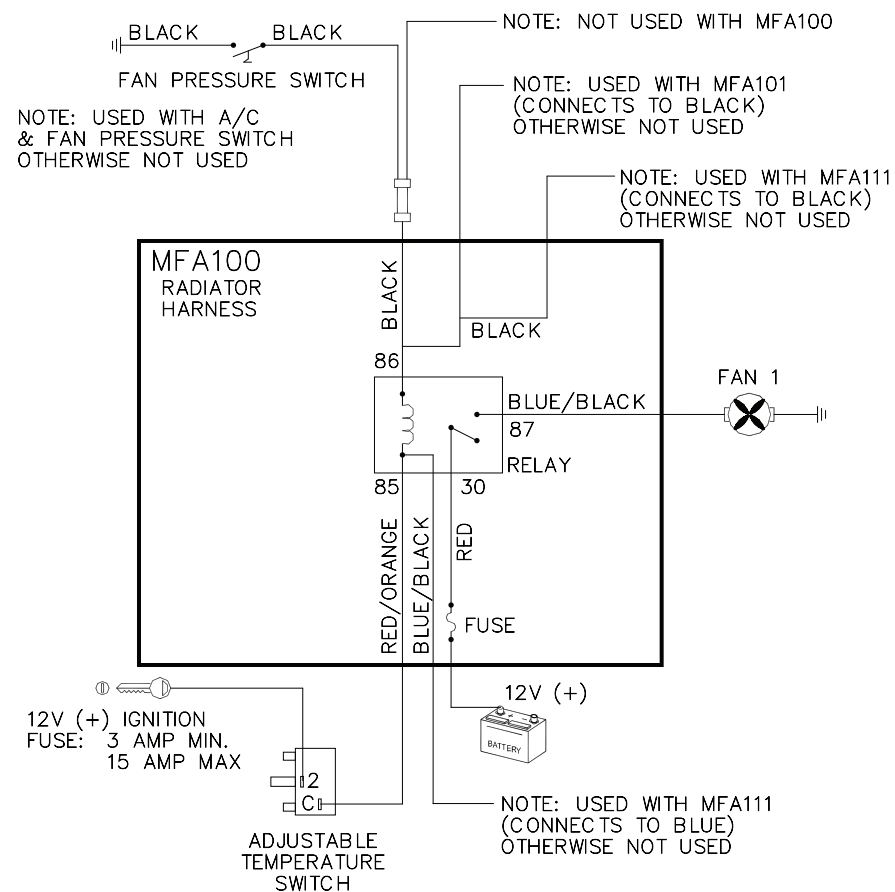


NOTE: RELAY IS 12V & WILL
NEED TO BE SWITCHED IF
USING DIFFERENT VOLTAGE



TYPICAL WIRING DIAGRAM

MFA100



MFA101 - CONDENSER FAN HARNESS WIRING INSTRUCTIONS

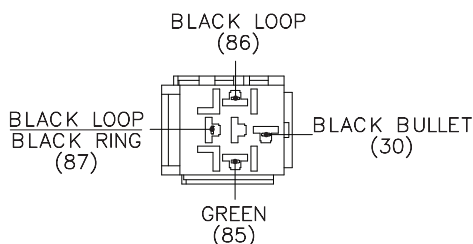


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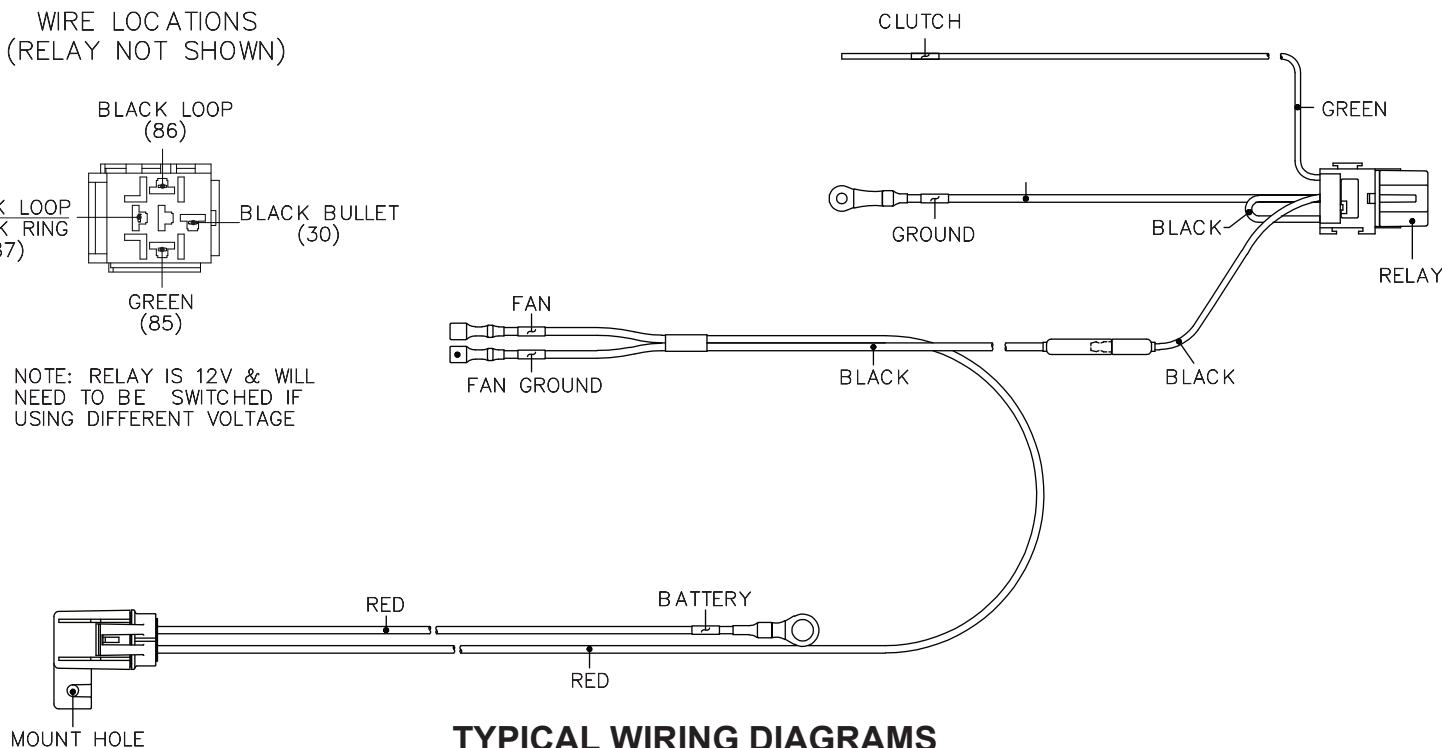
MFA101 Condenser Fan Harness

MFA101 is used to engage an electric fan in conjunction with the Radiator Fan Harness. In this application, the fan will be engaged any time the compressor clutch is engaged. It may also be used to engage an auxiliary electric fan, only when the A/C clutch is engaged.

WIRE LOCATIONS (RELAY NOT SHOWN)

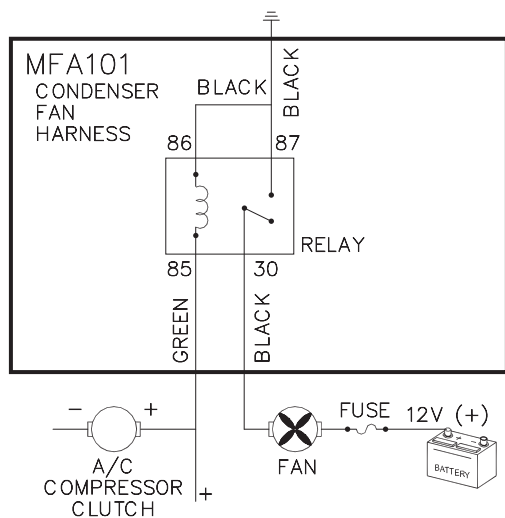


NOTE: RELAY IS 12V & WILL NEED TO BE SWITCHED IF USING DIFFERENT VOLTAGE

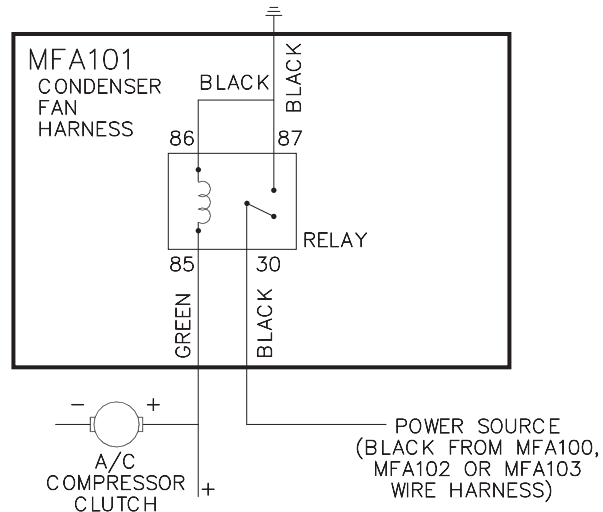


TYPICAL WIRING DIAGRAMS

Condenser Fan Only w/o Fan Pressure Switch



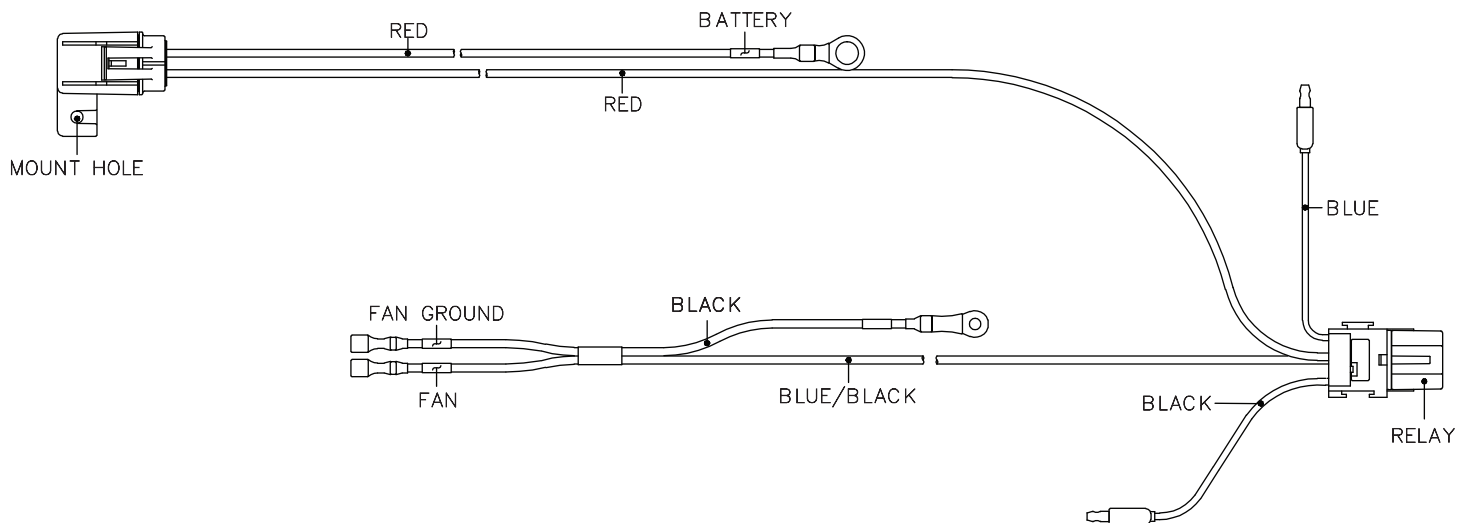
Radiator Fan – A/C w/o Fan Pressure Switch w/Positive Switched Compressor



MFA111 - DUAL FAN ADAPTER HARNESS WIRING INSTRUCTIONS



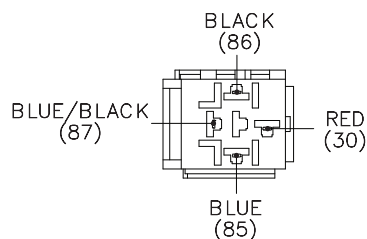
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MFA111 is used to engage a second electric fan in conjunction with the Radiator Fan Harness.

TYPICAL WIRING DIAGRAM

WIRE LOCATIONS
(RELAY NOT SHOWN)



NOTE: RELAY IS 12V & WILL
NEED TO BE SWITCHED IF
USING DIFFERENT VOLTAGE

