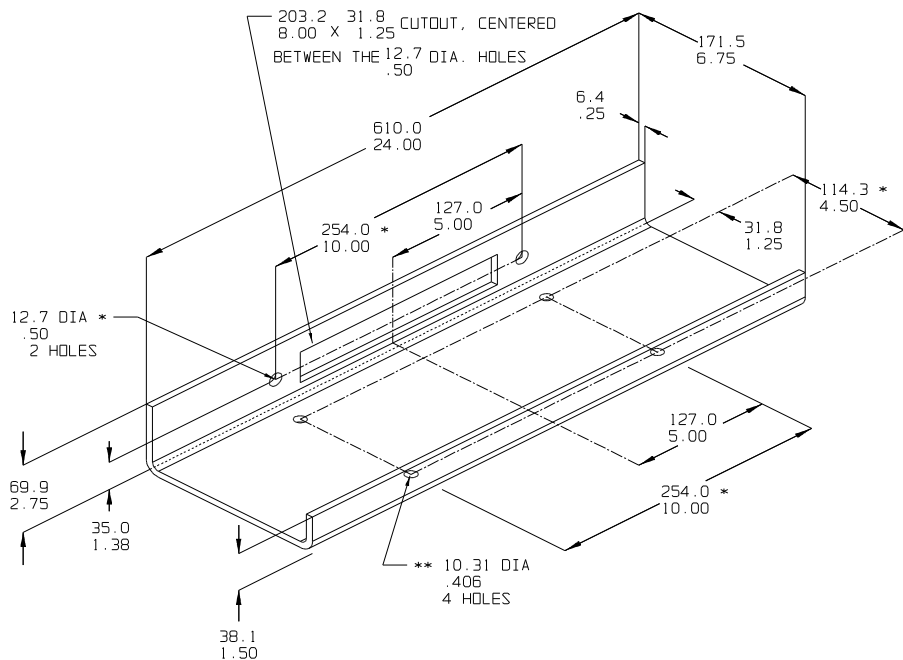
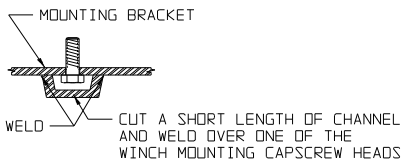


A plate-type bracket for flat bed or custom mounting, similar to the illustration below, is available from Warn Industries. If you choose to fabricate your own mounting plate, follow the dimensions and tolerances closely. Damage resulting from improper mounting is specifically excluded from warranty. Use grade 5 or better fasteners.

SUGGESTED WINCH MOUNTING BRACKET



ALL DIMENSIONS:	MILLIMETERS	INCHES
TOLERANCES:	** ±.3 ±.01	* ±.8 ±.03
ALL OTHERS:	±1.5 ±.06	



ANTI-THEFT PRECAUTION

27330 REV B0



WARN INDUSTRIES, INC.

INSTALLATION INSTRUCTIONS

WARN® WINCH ELECTRIC / 2-WAY



NOTICE TO INSTALLER:
THE WINCH USER MUST RECEIVE THIS PAMPHLET FOR DETAILED SERVICE INFORMATION.



DO NOT INSTALL THIS WINCH BEFORE YOU HAVE READ AND UNDERSTAND THE OWNER'S MANUAL. IT CONTAINS IMPORTANT SAFETY INFORMATION.

WARN INDUSTRIES, INC. / 12900 SE CAPPS ROAD/
CLACKAMAS, ORE. 97015-8903 / (503) 722-1200
CUSTOMER SERVICE LINE 1-800-543-9276

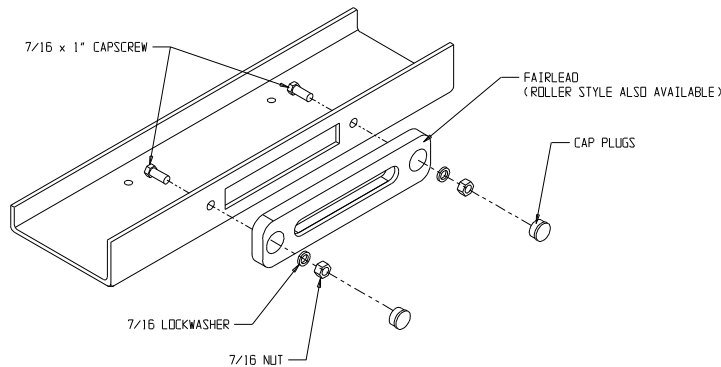
INSTALLATION INSTRUCTIONS

The mounting hole pattern is of critical importance to the strength of your winch. For winches which are not mounted on a factory mounting plate, it is recommended that you use a winch mounting bracket as that shown on the last page, applying the illustrated hole pattern, hole diameters and tolerances.

WINCH MOUNTING

1. The winch is to be mounted **feet down** on a horizontal mounting plate only. Mounting the winch in any other position may not allow moisture to drain properly from the motor and solenoid housing resulting in possible electrical failure.

Prior to mounting the winch, install the fairlead on the front of the plate with the supplied 7/16-14 x 1" grade 5 capscrews, lockwashers and nuts. Insert the fairlead capscrews from the **inside** of the mounting plate with the lockwashers and nuts against the fairlead. This will provide clearance for the winch.

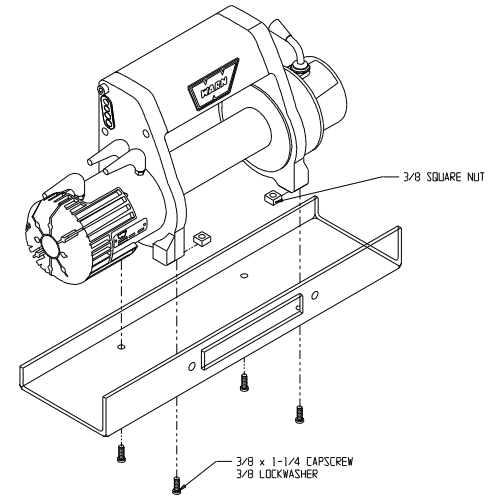


2. Attach the winch to the plate with the supplied 3/8-16 x 1-1/4 grade 5 capscrews, lockwashers and square nuts on a 3/16" to 1/4" thick mounting plate. (Cavities are provided in the winch feet for the square nuts). Tighten the capscrews to 33lb. Ft. (45 N-m).



TO AVOID DAMAGE TO THE WINCH, DO NOT USE FASTENERS LONGER THAN THOSE RECOMMENDED.

3. **IMPORTANT:** Assure that the drum rotates freely with clutch disengaged. If drum binds or does not rotate freely, the mounting plate is not flat. Place shim washers between the winch and mounting plate until the drum rotates freely.



DO NOT WELD THE HEAD OF ANY BOLT OR CAPSCREW used for attaching the winch mounting kit or bumper kit. Metallurgical changes, after welding, can occur and cause the fasteners to become brittle and break, even under no-load conditions. This could result in personal injury or property damage.

ELECTRICAL CONNECTIONS

1. Connect the long red cable to the positive (+) battery terminal.
2. Connect the long black cable to the negative (-) battery terminal.
3. Before initial use of your winch, plug in remote control and test for proper forward and reverse operation, keeping hands free of wire rope.



KEEP HANDS AWAY FROM WIRE ROPE AND HOOK WHILE TESTING.

NOTE: A fully charged conventional automotive battery with a minimum rating of "650 cold cranking amps" is recommended to obtain peak performance from your winch. Make sure all electrical connections are clean and tight.

CLUTCH OPERATION

The clutch is located on the gear housing. To engage, rotate the clutch clockwise. To free spool, rotate the clutch counterclockwise. Be certain the indicator is completely at the "Engaged" or "Free Spool" positions before using. If the clutch does not engage easily, rotate the drum to align gears.



DO NOT ROTATE THE CLUTCH OUT OF THE "ENGAGED" POSITION WHILE UNDER LOAD! THE BRAKE WILL NOT FUNCTION WITH THE CLUTCH IN "FREE SPOOL."