SIDEWINDER WINCH
1973 CHEVY & GMC TRUCKS

INSTALLATION INSTRUCTIONS

HICKEY
1645 CALLENS ROAD
VENTURA, CALIFORNIA

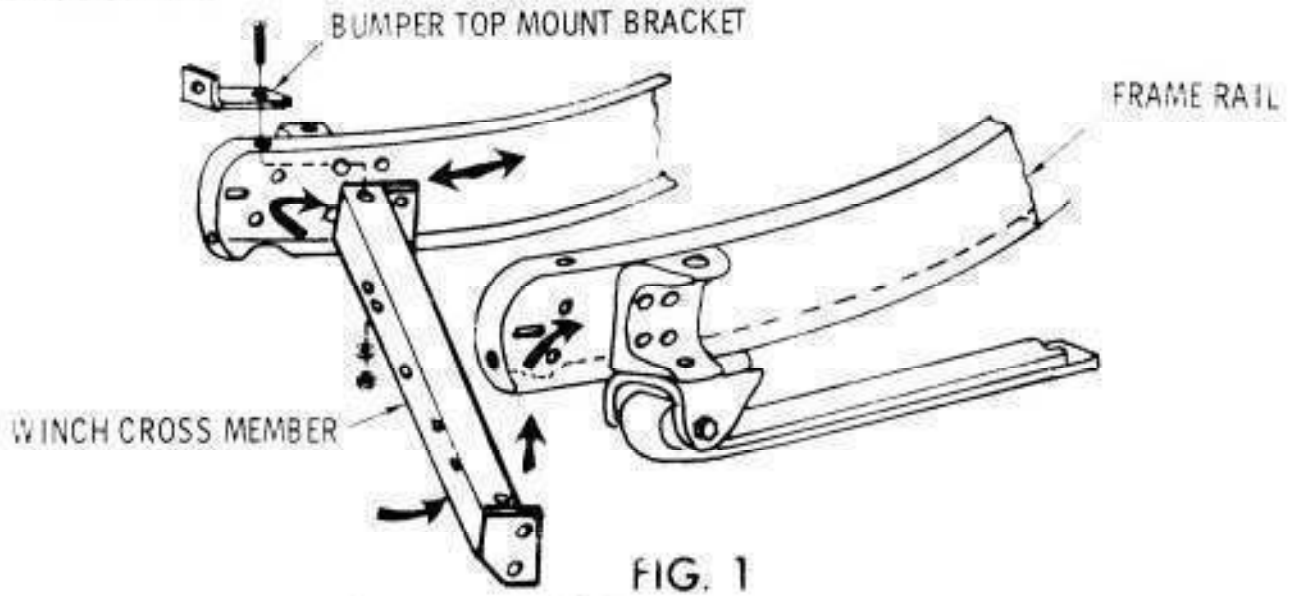
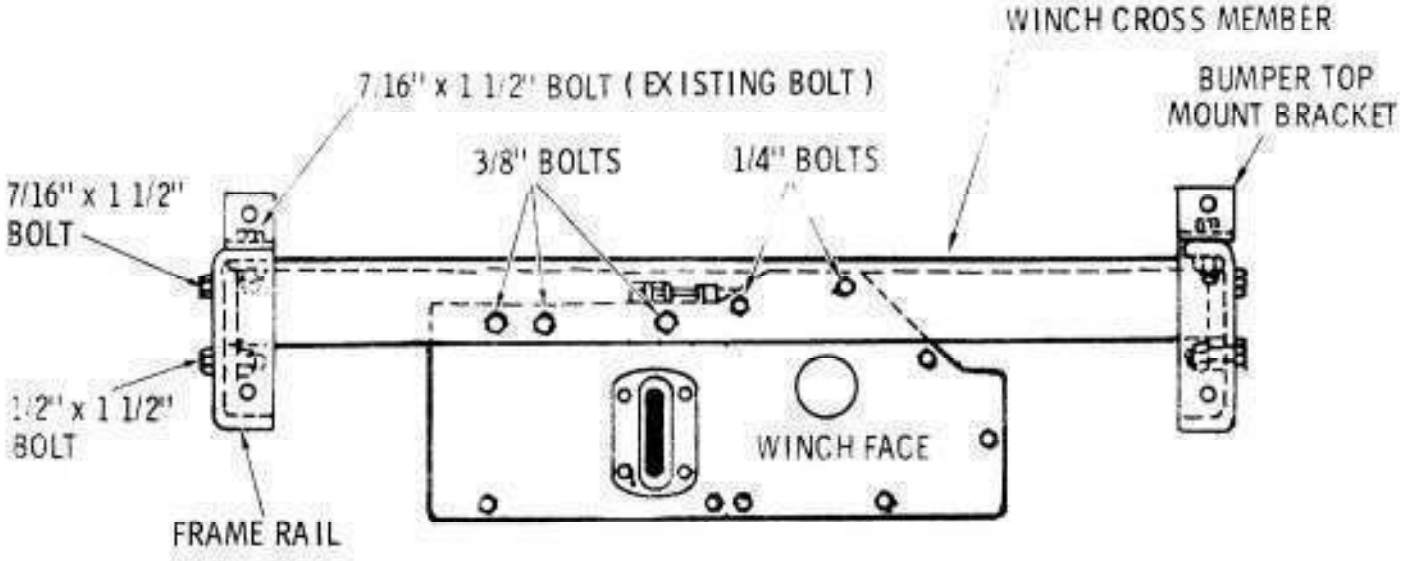


FIG. 1

1. Remove front bumper and top mount brackets for bumper. Place winch cross-member in position between frame rails as illustrated in Fig.1. Align winch cross member and install the frame rail to winch cross member bolts as shown in Fig. 2.



FRONT VIEW

FIG. 2

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2. Remove the top three 3/8" bolts and the top two 1/4" bolts from the winch face. Place winch face on winch cross member as illustrated in fig. 2 and replace the bolts on winch face. Use longer 3/8" x 1 1/4" bolts and 1/4" x 1" N.C. bolts with lock washers on these mounts. Place 1/2" spacers behind cable guide. Replace the cable guide bolts with 5/16" x 1" bolts. See Fig. 3

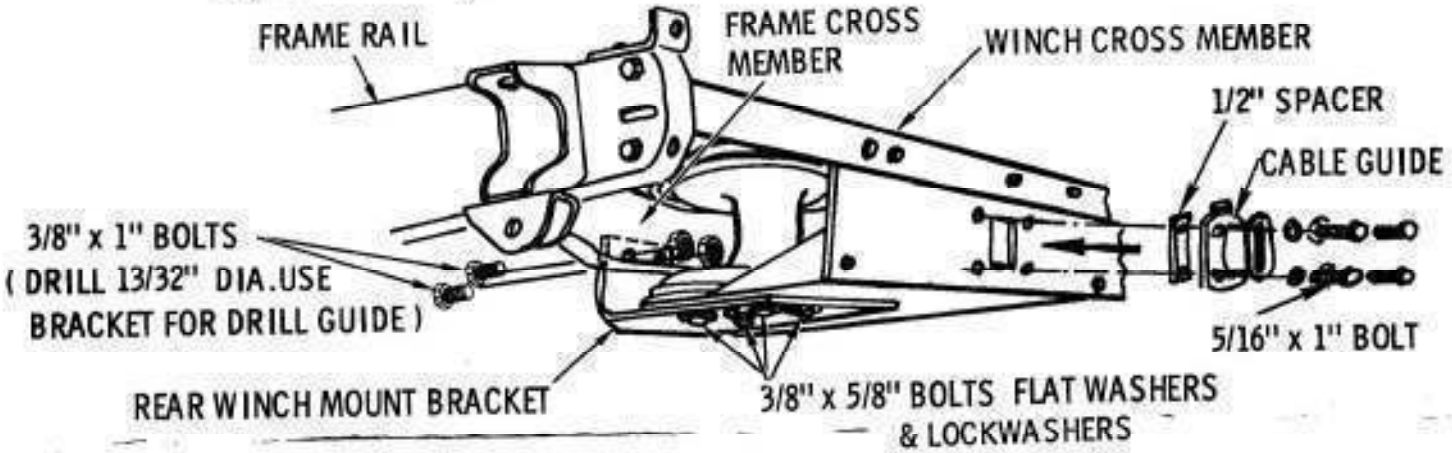


FIG. 3

3. Place rear winch mount bracket against bottom rear of winch and mount with four 3/8" x 5/8" bolts and lockwashers.* See Fig.3. Push the vertical leg on the rear winch mount bracket up against the rib in the frame cross member and mark for drilling. Drill two 13/32" dia. holes using the holes in the rear winch mount bracket as drill guides. It may be necessary to loosen the front suspension sway bar in order to drill these holes. Mount the bracket with 3/8" x 1" bolts, nuts and washers

* Use a flat washer also - Once tightened check to make sure adequate clearance exists between recess in drum and end of bolts.

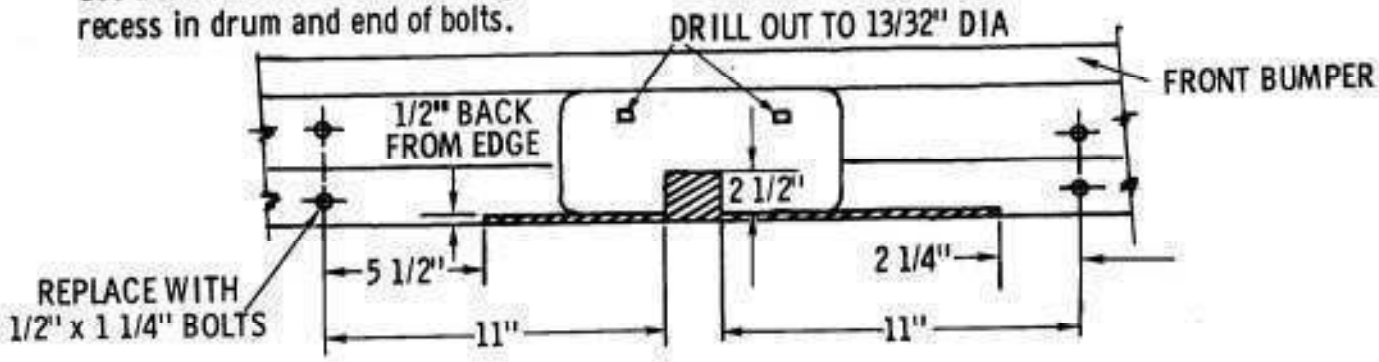


FIG.4

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4. To mount winch clutch linkage two holes must be drilled in the core support area. See Fig.5 for for hole locations. Once hole is finished, stick clutch linkage up from behind grill thru drilled hole and screw on nob tightly. Mount clevis to winch clutch arm with pin and cotter key.



FIG.5

To guarantee full engagement of clutch adjust clutch linkage by twisting nob to a position where knob rest against core support in the ENGAGED position. At this position the clutch is fully engaged. Lock the clevis and rod with the lock nut. Pull up on the knob and push to the right and the clutch is fully disengaged or in free wheel.

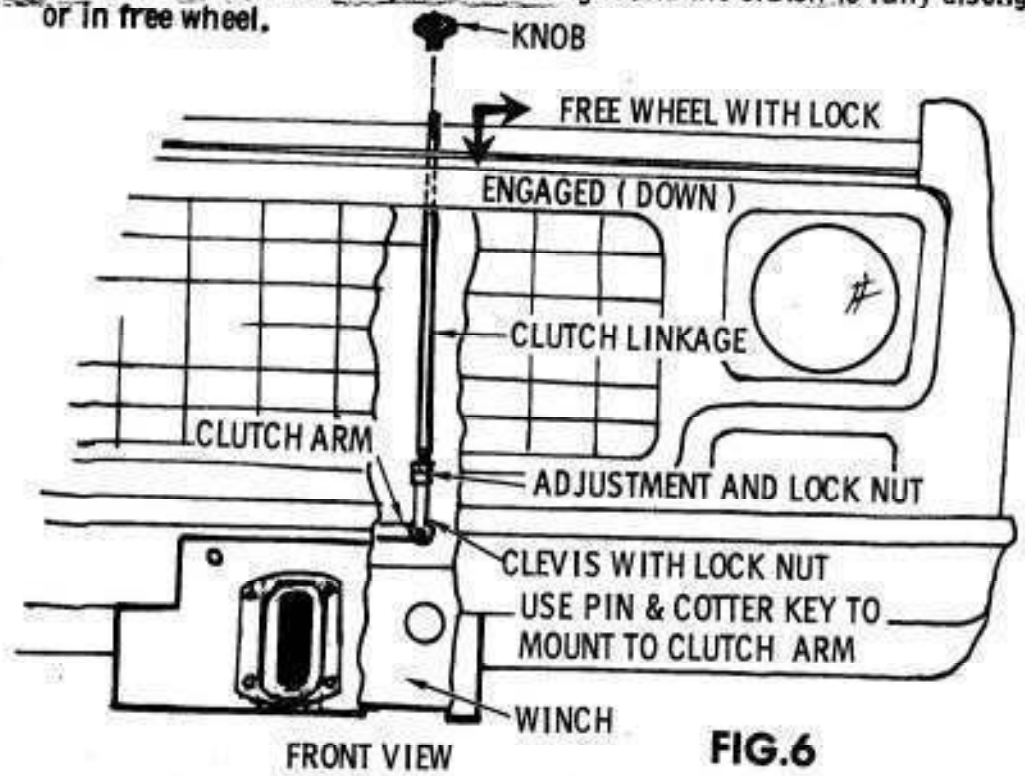


FIG.6

NOTE : ADJUST WINCH CLUTCH LINKAGE CAREFULLY. PARTIAL ENGAGEMENT CAN DAMAGE CLUTCH UNIT.

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5. Cut front bumper as illustrated in Fig. 4 and replace on vehicle. Use the standard bumper bolts on all mounts except the inside bottom in which you replace with a 1/2" x 1 1/4" bolt, washer and nut provided in kit. Drill out the two license plate holes in bumper to 13/32" as shown in Fig. 4.

6. Hook up electrical controls (See Operation Instructions and Winch Installation Instructions)

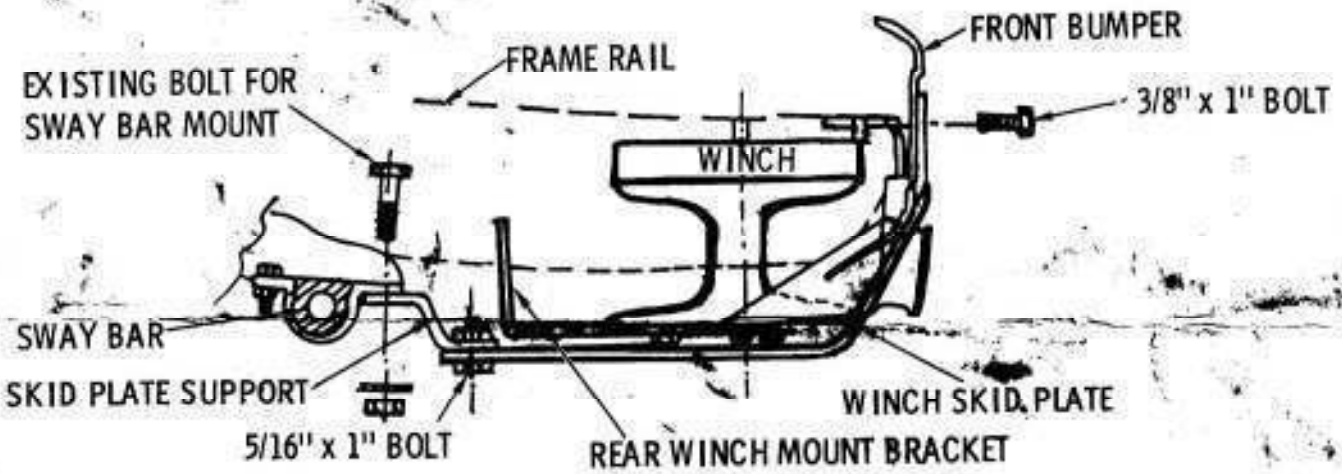


FIG.8

7. Remove the forward sway bar nuts and washers and mount the skid plate supports. Attach the skid plate supports with 5/16" bolts and nuts and lockwashers provided. Attach the front of the skid to the bumper with the two 3/8" x 1" bolts nuts and lockwashers provided.

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SIDEWINDER

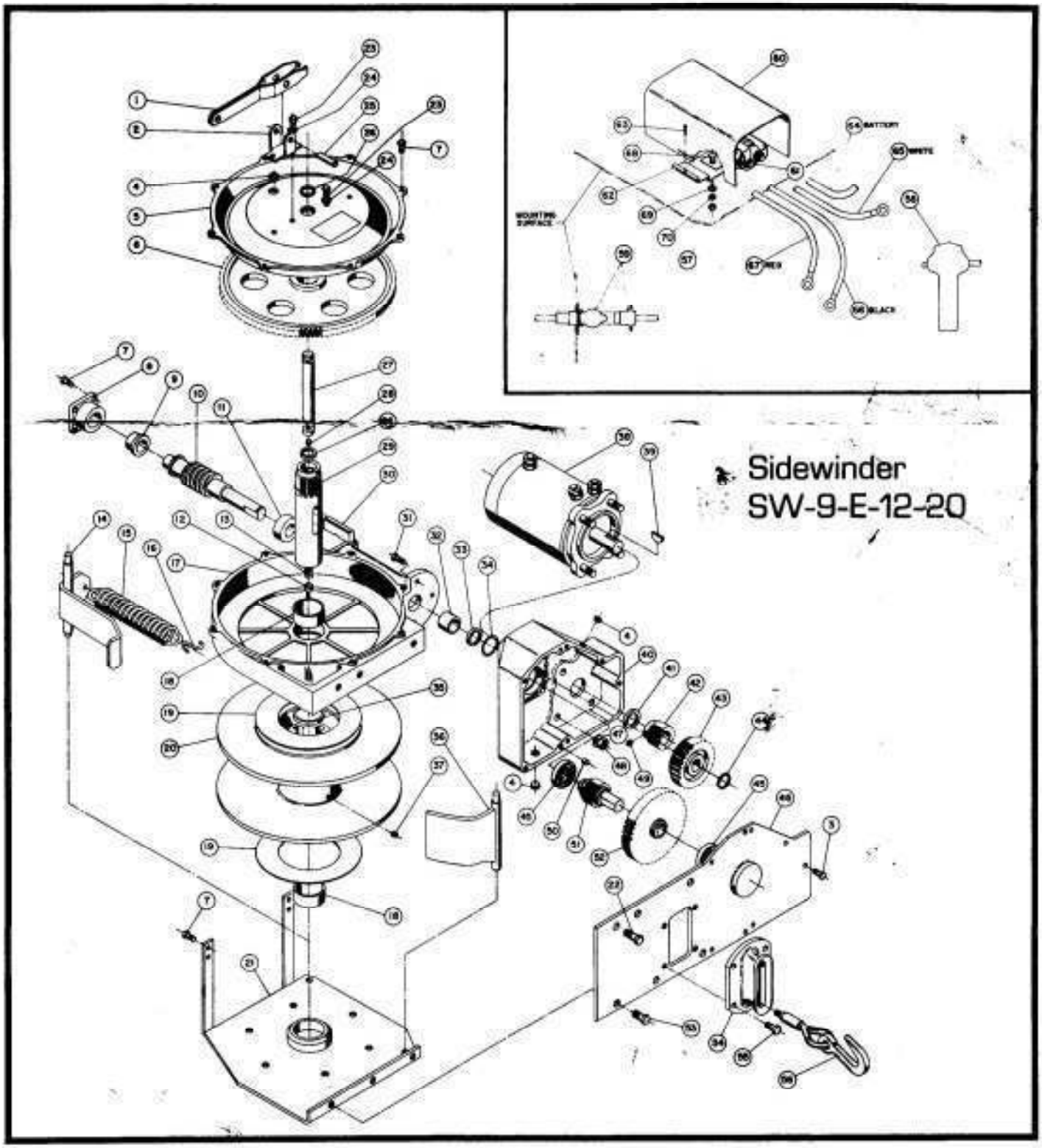
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Installation Instructions

By following these simple instructions you will realize the fullest life and service from your Sidewinder winch.

A. Bill of Material

Your Sidewinder winch is packaged in two separate containers that provide all the necessary materials to assemble the Sidewinder winch to your vehicle.

I. Sidewinder winch package consists of the following items:
   1. Sidewinder Winch Assembly
   2. Wire Cable Assembly, Item #56
   3. Switch Assembly, Item #58
   4. Solenoid Assembly, Item #61
   5. Wire Assemblies (4),
      Item #64 (Black #2 GA)
      Item #65 (White)
      Item #66 (Black #6 GA)
      Item #67 (Red)
   6. Solenoid Cover, Item #60
   7. 7" x 12" plastic bag containing the following loose parts:
      Roll Pin, Item #25
      Bracket, Item #2
      Shifter Lever, Item #1
      Connector Assembly, Item #59 (with instruction sheet)
      Solenoid Mounting Plate, Item #62
      (2) Capscrew ¼-20 x ⅜", Item #68
      (2) Nut, Item #57
      (2) Lockwasher, Item #70
      (2) Flat Washer, Item #69
      (2) Cotter Pin, Item #63

II. The installation mounting kit for attaching the Sidewinder winch to the vehicle frame varies with each vehicle make and model. Please consult the instructions contained in your installation kit to familiarize yourself with the materials and recommended method for installing the Sidewinder winch to your vehicle.

B. Lubricating Instructions

The Sidewinder winch has been filled with the correct lubricant at the factory. You may notice oil weepage from the winch shifter shaft. This weepage is normal and not detrimental to the unit's operation.

Before installing the Sidewinder winch, check the fluid level of both gear housings to insure the proper amount of lubricant is available. The front gear housing, Item #40 (next to the motor) has a capacity of (1) one pint and the fluid level can be checked at the pipe plug hole, Item #4, on top of the housing. The worm gear housing, Item #17, has a capacity of (1½) one and one-half pints and the fluid level can be checked at the pipe plug hole (Item #4) in the cover (Item #5).

Periodic lubricant level inspections should be made every six months under normal use with SAE #140 "mild" type lubricant added if needed.

Caution: **Overfilling the winch gear cases could result in excessive leakage during operation. Oiling of the electric motor is *not* required.**

C. Clutch Shift Lever Installation

Remove (2) capscrews, Item #23, and (2) washers, Item #24, from cover, Item #5, and attach bracket, Item #2, to the cover.

Note: **The shifter lever can be positioned on either side of the clutch shifter shaft. Consult your installation mounting kit directions for the correct position.**

Secure shifter on shaft, Item #27, with roll pin, Item #25.

D. Sidewinder Winch Installation

Your Sidewinder winch should be installed on your vehicle in accordance with the instructions contained in the installation mounting kit.

E. Solenoid and Wiring Installation

I. Attach mounting plate, Item #62, and solenoid assembly, Item #61, as close as possible to the Sidewinder's electric motor and vehicle battery with (2) capscrews, Item #68, (2) flat washers, Item #69, (2) lockwashers, Item #70, and (2) nuts, Item #57.

Caution: **Mount to fender well or other suitable location where solenoid mounting plate will not be distorted. The solenoid assembly should be mounted with its axis horizontal to the road surface to prevent rough terrain from activating the solenoid.**

II. Install wire assemblies, Items #64, 65, 66 and 67, as shown in Figure 1. If possible, wire lengths should be reduced by cutting and reinstalling terminals. If distance between solenoids and motor requires longer wire than provided, wire size must be increased. The larger the wire diameter, the better the winch performance will be.

Caution: **Solenoids are interlocked to provide positive reversibility. Extreme care must be taken to maintain solenoid alignment during installation to prevent binding and malfunctioning of the interlocking mechanism. If suitable means of reinstalling terminals is not available, do not attempt to shorten wires.**

III. Determine the most desirable location for connector, Item #59, mounting to meet your requirement (i.e., under hood, in grill work, on dash, etc.). If the connector is to be mounted in a position exposed to the weather, it should be mounted on a vertical surface to prevent water from entering the connector.

Note: **Splice connector into the switch assembly, Item #58, wire, making sure that switch wires are aligned, black to black, green to green, white to white. See instruction sheet for connector, Item #59, for correct assembly method.**

IV. Install cover, Item #60, to mounting plate, Item #62, and secure with (2) cotter pins, Item #63.

Your Sidewinder winch is now ready for installation of the cable.

Caution: **Do not operate winch without cable.**

F. Sidewinder Winch Cable Installation

1. Unwind cable assembly, Item #56, by placing the hook end on the ground and roll toward vehicle to prevent cable kinking.
2. Place end of cable opposite the hook, through guide, Item #54, and into the hole provided in drum, Item #20. Insure set screw, Item #37, is tight to secure cable.

   Caution: **To prevent cable pull out during operations, your Sidewinder winch should not be operated with *less than three wraps* of cable on the bare drum.**
3. Wind cable on drum in even layers, using power from the winch.

   Caution: **Do not run winch in pay out direction with no cable on winch drum or during initial cable installation. Packer arm assembly will be damaged.**

G. Break-In Period

WINCHES, LIKE PRECISION MACHINERY, SHOULD BE OPERATED CAREFULLY DURING INI-

TIAL OPERATION. THE INITIAL PULL (40 to 50 feet) SHOULD BE AT 1/6 WINCH RATING (1500#) AVOIDING SHOCK LOADS AS MUCH AS POSSIBLE. INCREASE LOAD ON SUBSEQUENT PULLS IN INCREMENTS OF APPROXIMATELY 1000# UNTIL ½ WINCH RATING (4500#) IS ACHIEVED. AFTER THE BREAK-IN PERIOD THE WINCH CAN BE USED TO RATED CAPACITY.

H. General Operating Instructions

1. *Electrical Operations*

For trouble-free electrical winch operation, be sure the battery is always fully charged and maintained. All electric winches are directly dependent on the *quality* and *capacity* of battery and alternator.

Note: **For efficient operation, a 70 amp/hour battery and a 40 amp alternator are the minimum recommended. Winch performance will be improved by increasing these capacities.**

When the winch is in use, the engine of the vehicle should be run at fast idle to minimize battery exhaustion. If the winch is in constant use, an auxiliary battery is recommended.

Note: **All terminal connections to motor, solenoids, switch, battery ground (vehicle), require good clean tight connections. Winch performance is directly related to good electrical connections and adequate wire size. If, after installation, performance is questionable, then check connections. If frequent operation is required, an increase in wire size will improve performance.**

2. *Clutch Operations*

The Sidewinder is designed with a built-in spring engaged dog type clutch. By disengaging the clutch with the clutch lever the drum will roll free. To pay out cable from the winch prior to conducting a winching operation, disengage winch clutch lever and pull out the cable by hand or by vehicle movement to the required length to conserve your battery.

To start winching operations after paying out and attaching cable to load, or suitable anchor if vehicle is to be self-winched, re-engage clutch lever by moving lever to engaged position If difficulty in engaging clutch lever is encountered, rotate winch drum by momentary engagements of the winch hand control switch until clutch is fully engaged.

Caution: **Always insure the clutch is fully engaged before any winching operation and never disengage clutch when winch is under load.**

Your Sidewinder winch is of a worm gear type of construction and is not designed for use as a hoist. However, should it be used in this manner, the following allowances should be made:

To hold load when raising and lowering, release the electric control switch, thus stopping the winch. Due to the self-locking tendency of the worm and gear, the load will continue to move a short distance (depending on the weight of the load) before it comes to a complete stop.

3. *General Operation*

No special skill is needed to operate the Sidewinder winch. It is a simple, free-spooling, self-locking winch. Its electrical system is designed around a specially built motor; heavy duty solenoids operate the directional power required — simply and efficiently — with fingertip control. When operating a winch, basic rules should be followed:

a. It is recommended that most loads be pulled in from a "Straight-Ahead" position. If the cable is pulled against either side of cable guide, it will limit the maximum capacity of the cable.

b. When winching, pulling or lifting a load, be sure vehicle's brakes are applied securely and kept well applied throughout winching operations to prevent dangerous movement of the vehicle and/or load. When self-winching vehicle, be sure vehicle is free to move when assisted by your Sidewinder winch, and that parking and service brakes are not applied. Also check that vehicle is not against an immovable obstruction or encumbrance so that no undue dangerous strain or overload is put on your vehicle or winch.

c. Take care of your winch cable and practice safety around the cable. Your winch is only as good as your cable.

Caution: **Avoid any kinks in your cable, as this will drastically reduce the cable's load capacity.**

If your winch is operated in a corrosive environment (salt air or heavily salted roads) your cable should be lubricated frequently.

Caution: **Do not dead-head your cable hook against the bumper when spooling in. This condition will deteriorate the winch motor and battery, and could, over an extended period, cause structural damage to the bumper and supporting parts.**

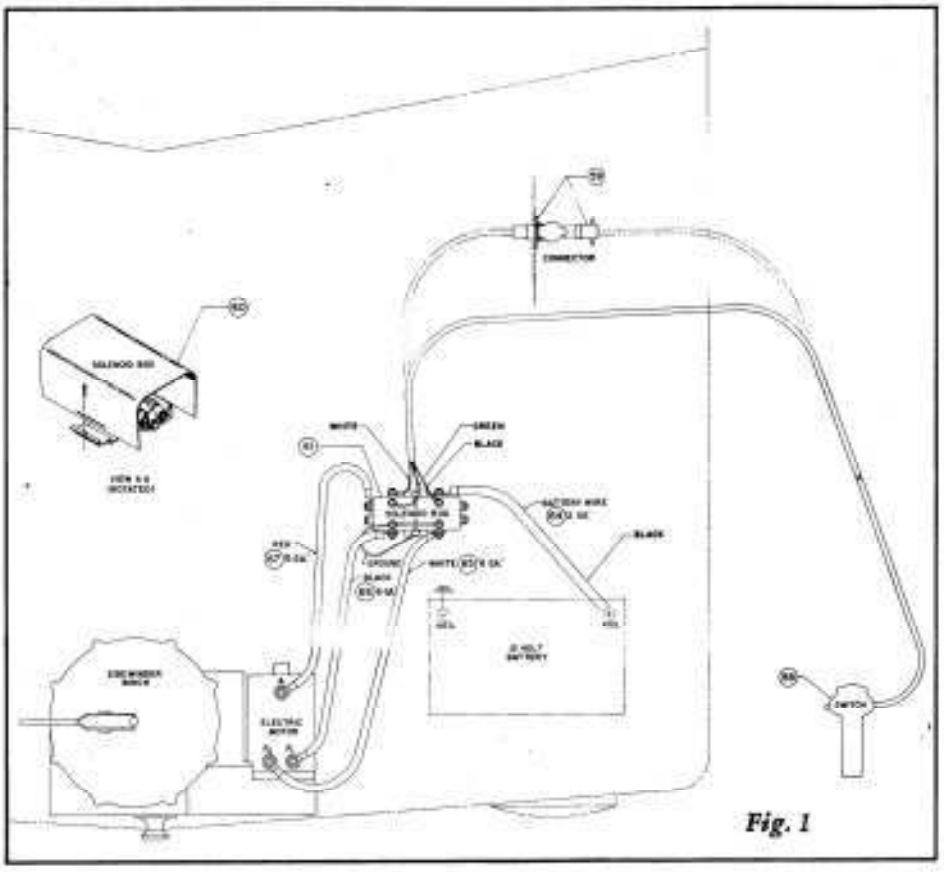


Fig. 1

Parts List

Sidewinder SW-9-E-12-20

Item No.	Part No.	Part Name	No. Req'd.	List Price
1	32468	Shifter	1	$ 3.95
2	32469	Bracket	1	1.00
3	32544	Cap Screw ¼-20 x ⅝	6	.10
4	32475	Plug	2	.50
5	32420	Cover	1	9.95
6	32426	Gear	1	49.95
7	27836	Cap Screw ¼-20 x ½	16	.10
8	32472	Cap	1	4.95
9	31698	Bushing	1	1.95
10	32463	Worm	1	24.95
11	32447	Bearing	1	1.50
12	32513	Bushing	1	.10
13	32437	Spring	1	.25
14	SA3555	Arm Assembly	1	5.95
15	32452	Spring	1	4.95
16	32453	Link	1	.25
17	32418	Housing	1	49.95
18	32445	Bushing	2	2.50
19	32438	Washer	2	2.95
20	32422	Drum	1	59.95
21	SA3556	Support Assembly	1	19.95
22	23296	Cap Screw ⅜-16 x ¾	3	.10
23	32526	Cap Screw ¼-20 x ⅜	4	.10
24	32527	Washer	4	.10
25	32480	Roll Pin	1	.30
26	32450	Seal	2	1.50
27	32465	Shaft	1	4.95
28	32540	Set Screw ¼-20 x ½	1	.35
29	32464	Shaft	1	24.95
30	32466	Key	1	2.95
31	14223	Cap Screw ¼-20 x 1	3	.15
32	32432	Bushing	1	.70
33	32449	Seal	1	1.00
34	30866	O-Ring	1	.25
35	32451	Seal	1	1.50

Item No.	Part No.	Part Name	No. Req'd.	List Price
36	SA3554	Packer Assembly	1	$ 4.95
37	32474	Set Screw ¼-20 x ⅜	1	.15
38	30516	Motor	1	89.95
39	22925	Key	1	.15
40	32416	Housing	1	49.95
41	32436	Seal	1	1.00
42	32460	Gear	1	11.95
43	32462	Gear	1	11.95
44	32483	Retainer	1	.10
45	32448	Bearing	2	4.95
46	32424	Cover	1	15.95
47	31274	Seal	4	.35
48	20271	Nut	4	.10
49	32479	Set Screw	1	.10
50	27844	Pin	2	.25
51	32461	Gear	1	14.95
52	32502	Gear	1	22.95
53	32549	Cap Screw ⅜-16 x ½	3	.15
54	32456	Guide	1	9.95
55	32545	Cap Screw ⅛-18 x ⅜	4	.10
56	32434	Cable Assembly	1	69.95
57	27889	Nut	2	.15
58	SA3559	Switch	1	29.95
59	32482	Connector	1	3.95
60	32435	Cover	1	3.40
61	SA3582	Solenoid Assembly	1	43.50
62	32446	Plate	1	.50
63	20912	Cotter Pin	2	.10
64	SA3564	Wire	1	11.25
65	SA3566	Wire	1	6.45
66	SA3567	Wire	1	6.45
67	SA3565	Wire	1	6.45
68	12652	Screw ¼-20 x ⅝	2	.10
69	23153	Washer	2	.10
70	23152	Washer	2	.10

Sidewinder Winch Warranty

FOR A PERIOD OF NINETY (90) DAYS AFTER DATE OF ORIGINAL INSTALLATION, HICKEY ENTERPRISES, INC. WARRANTS THAT THE SIDEWINDER WINCH WILL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP UNDER CUSTOMARY AND NORMAL INSTALLMENT, USE AND SERVICE. THESE EXPRESS WARRANTIES ARE THE SOLE WARRANTIES OF HICKEY ENTERPRISES, INC. AND ANY OTHER WARRANTIES EXPRESS, IMPLIED IN LAW, OR IMPLIED IN FACT ARE HEREBY SPECIFICALLY EXCLUDED AND DISCLAIMED. The sole and exclusive remedy for breach of any warranty concerning the Sidewinder Winch shall be repair or replacement of defective parts at an authorized Hickey Enterprises, Inc. Dealer or at Hickey Enterprises, Inc.'s option, refund of the purchase price. Hickey Enterprises, Inc. shall not be liable for injury to property other than the Winch itself.

The purchaser shall remain responsible for customary and normal maintenance and servicing described in the owner's guide packaged with each unit. Neglect and failure to comply with the maintenance and service program shall void this warranty.

The warranty shall not extend to any Winch or part thereof which has been subjected to improper installation, misuses or neglect. No allowance shall be made to the buyer for any transportation, labor charges or parts, adjustments or repairs, or any other work, unless such charges are authorized in advance by seller.

Hickey Enterprises, Inc. shall not be liable or responsible for damage or loss proximately caused by failure in operation or defects in material and workmanship other than herein provided.

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