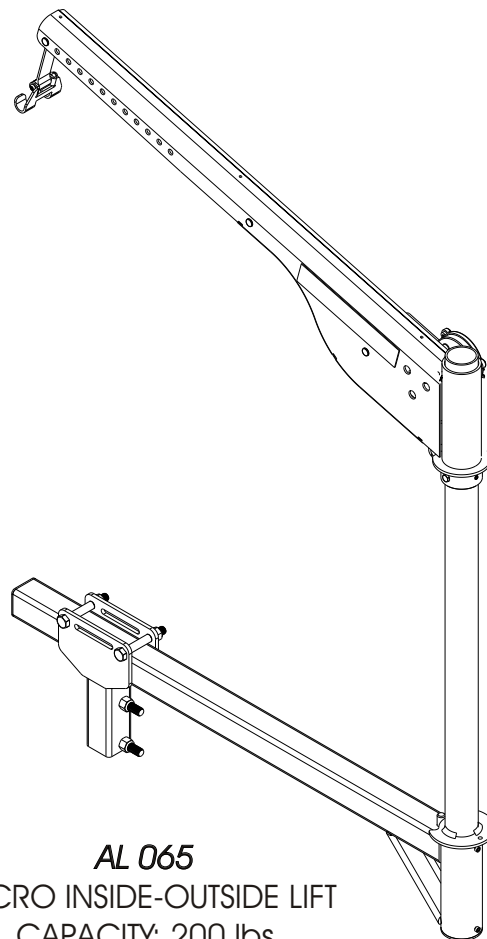


AL 055
MICRO INSIDE LIFT
CAPACITY: 200 lbs



AL 065
MICRO INSIDE-OUTSIDE LIFT
CAPACITY: 200 lbs

Read manual thoroughly before attempting to install or operate lift.

This manual has been provided to assist you with lift installation and operation. For further assistance please contact your authorized Harmar Mobility dealer or Harmar's Technical Service Department.

Tech: 866-378-6648

Fax: 941-308-7399

Email: tech@harmar.com

Harmar
2075 47th ST
Sarasota, FL 34234
Tel: 800-833-0478

Dealer:

Serial Number:



PREPARATION

TOOLS RECOMMENDED	p 2
UN-PACKING THE LIFT	p 3
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INSTALLATION

INSTALLATION	p 6-7
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OPERATION

OPERATION	p 9-10
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TOOLS RECOMMENDED



THE FOLLOWING IS A SUGGESTION OF BASIC TOOLS RECOMMENDED TO HAVE ON HAND DURING INSTALLATION
 AS WELL AS A GUIDE TO PORTRAY COMPLEXITY OF THIS TYPE OF INSTALLATION
 THIS IS, BY NO MEANS, MEANT TO REPRESENT THE REQUIREMENTS AS A WHOLE, AS EACH INSTALLATION WILL
 VARY TO SOME DEGREE. HARMAR LIFTS ARE DESIGNED TO INSTALL WITH AS LITTLE ASSEMBLY AS POSSIBLE.



SAE SOCKET

7/16"
 1/2"
 9/16"
 3/4"



SAE WRENCH

7/16"
 1/2"
 9/16"
 3/4"



SAE ALLEN WRENCH

5/32"
 1/8"
 3/16"
 5/16"
 3/8"



WIRE CUTTERS



NEEDLE NOSE
 PLIERS

#2 FLAT HEAD
 SCREWDRIVER



#2 PHILLIPS HEAD
 SCREWDRIVER



SMALL HACKSAW



ELECTRIC DRILL



MARKING
 IMPLEMENT



TAPE MEASURE




DRILL BITS

PILOT DRILL BIT
 3/8" DRILL BIT
 9/16" DRILL BIT



METAL FILE

As always, if you have any questions, concerns or comments, please feel free to contact
 Harmar's Technical Service Department at 866-378-6648 or "tech@harmar.com" 

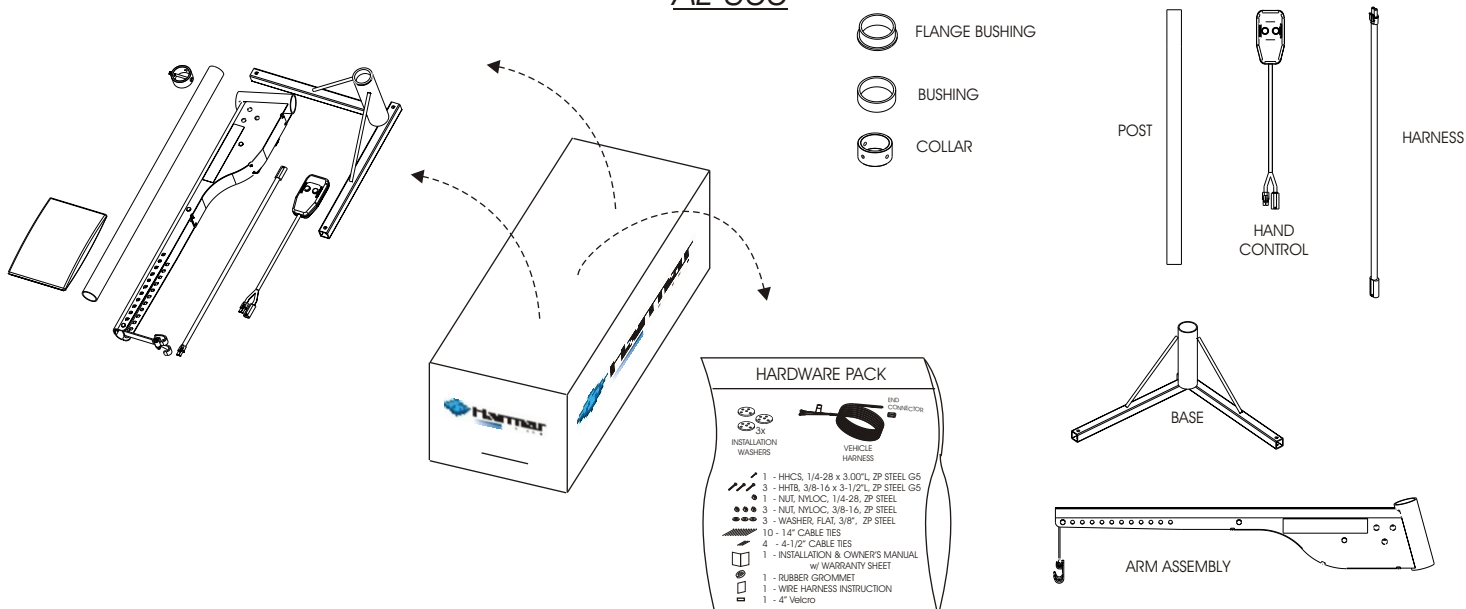


UNPACKING THE LIFT

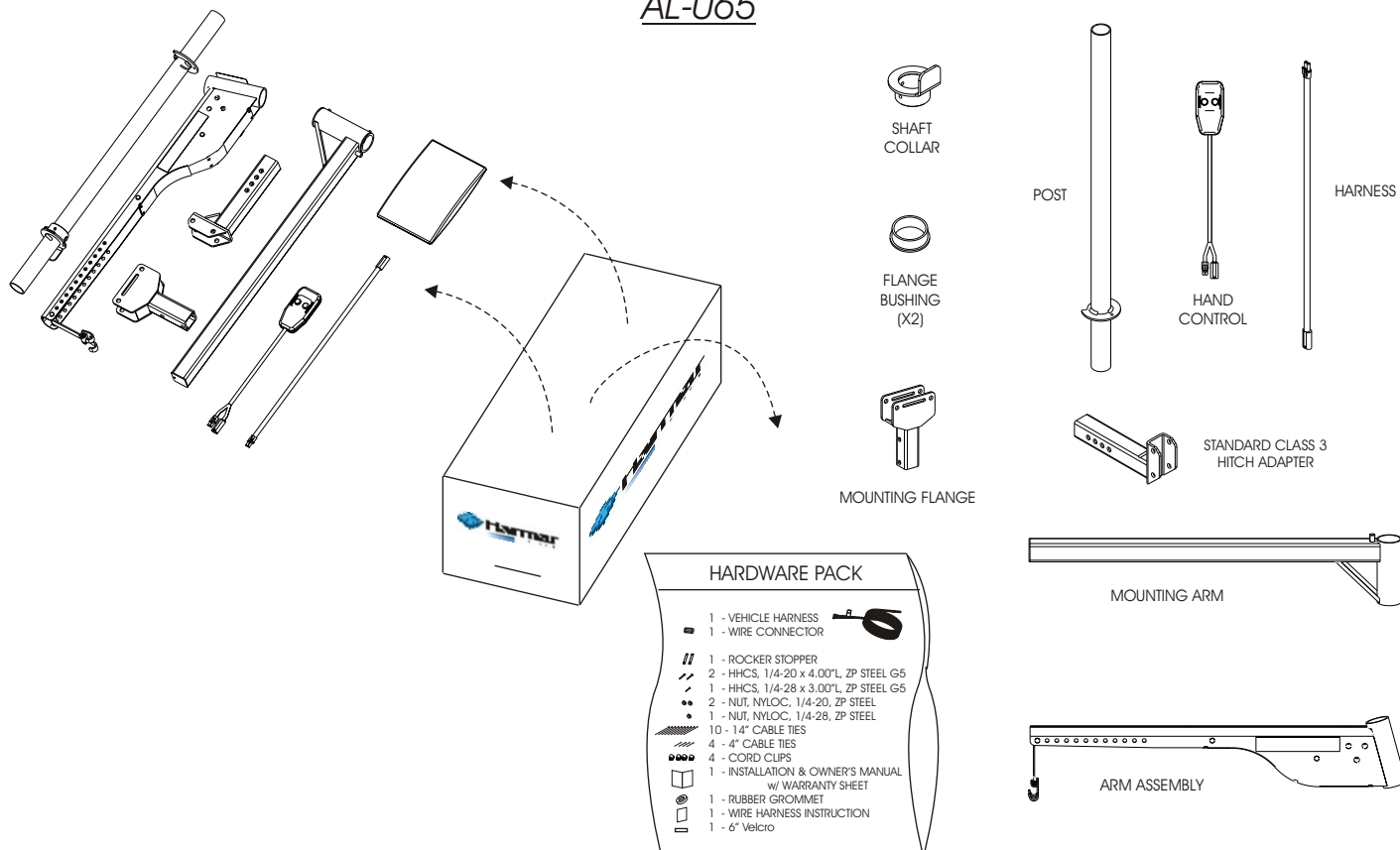
IF ANY PARTS ARE MISSING OR IF ANY DAMAGE IS NOTED, IMMEDIATELY CONTACT THE DISTRIBUTOR FROM WHICH YOU PURCHASED YOUR LIFT. DO NOT ATTEMPT TO INSTALL OR USE THE LIFT WITH ANY MISSING OR DAMAGED PARTS

BE SURE TO CHECK THE CONTENTS OF THE BOX AGAINST THE PACKAGE CHECK LIST TO BE SURE THAT ALL THE PARTS ARE INCLUDED WITH THE LIFT THAT ARE REQUIRED FOR PROPER INSTALLATION

AL-055



AL-065





IMPROPER WIRING IS THE #1 CAUSE OF PROBLEMS IN THE OPERATION OF A VEHICLE LIFT.

FOLLOW THE WIRING INSTRUCTIONS CAREFULLY

LOCATED IN THE HARDWARE PACK IS THE VEHICLE WIRING HARNESS. THE HARNESS IS MANUFACTURED TO AND COMPLIES WITH, THE SAE J1128 REQUIREMENTS. THE WIRE HARNESS IS APPROXIMATELY 23 ft LONG AND WILL ACCOMMODATE MOST VEHICLES.

YOUR WIRING HARNESS HAS BEEN LEFT UN-ASSEMBLED FOR EASE OF INSTALLATION. THE END CONNECTOR HAS BEEN INCLUDED SEPARATELY FROM THE HARNESS TO ALLOW THE INSTALLER TO RUN THE WIRE UNDER AND THROUGH THE VEHICLE WITH THE SMALLEST HOLE POSSIBLE. FOLLOW THESE INSTRUCTIONS TO ASSURE PROPER INSTALLATION. DO NOT CONNECT RED WIRE UNTIL THE VERY END.

UNWIND THE HARNESS AND LAY IT FLAT. ONE END OF THE HARNESS HAS 2 COVERED PINS. THIS IS THE LIFT END OF THE HARNESS AND GOES TO THE REAR CARGO AREA WHERE THE LIFT WILL MOUNT.

- ① BEGIN ROUTING THE WIRING HARNESS AT THE VEHICLE BATTERY. ATTACH THE BLACK WIRE TO THE NEGATIVE TERMINAL ON THE BATTERY. DO NOT ATTACH THE RED WIRE UNTIL THE END.
- ② RUN THE WIRING HARNESS UNDER OR WHEN POSSIBLE THROUGH THE VEHICLE, BACK TO THE REAR CARGO AREA / TRUNK. ALWAYS LOCATE THE WIRING WHERE IT CAN NOT BE SNAGGED BY ROAD DEBRIS AND AWAY FROM THE GAS TANK. THROUGH THE VEHICLE IS BEST, GAINING ENTRY INTO THE VEHICLE THROUGH THE FIREWALL. HOWEVER IF YOU WISH TO RUN THE HARNESS UNDER THE VEHICLE, A HOLE WILL MOST LIKELY NEED TO BE DRILLED TO GET THE WIRE INTO THE REAR CARGO AREA / TRUNK. IF THE HARNESS IS TOO LONG FOR THE VEHICLE, COIL THE EXCESS WIRE AND SECURE IT TO THE VEHICLE FRAME WITH SUPPLIED TIE WRAPS.

DO NOT CUT OR SHORTEN THE HARNESS.

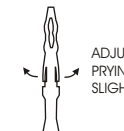
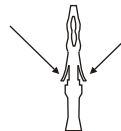
- ③ ONCE THE HARNESS IS RUN INTO THE VEHICLE, REMOVE PIN'S PROTECTIVE TUBING.



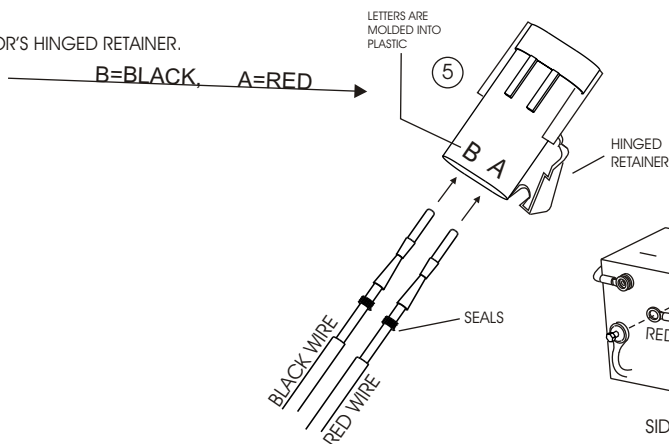
- ④ INSPECT THE PIN'S RETAINING FLANGES. THEY MAY HAVE BECOME DEFORMED WHILE RUNNING THEM THROUGH THE VEHICLE. THESE ARE CRITICAL TO SECURE THE PINS INSIDE THE END CONNECTOR. ADJUST AS NEEDED.

CORRECT

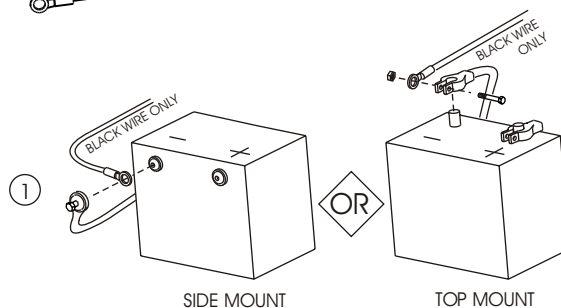
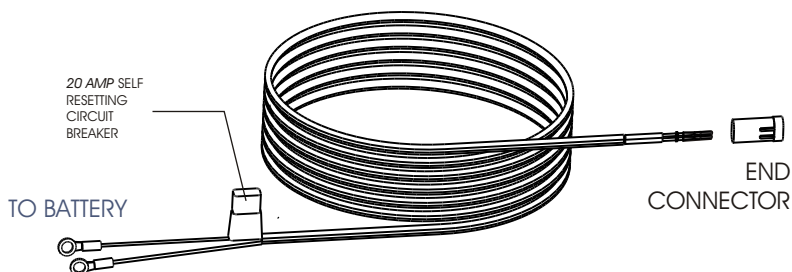
IF NEEDED



- ⑤ FLIP OPEN END CONNECTOR'S HINGED RETAINER. INSERT PINS AS SHOWN:

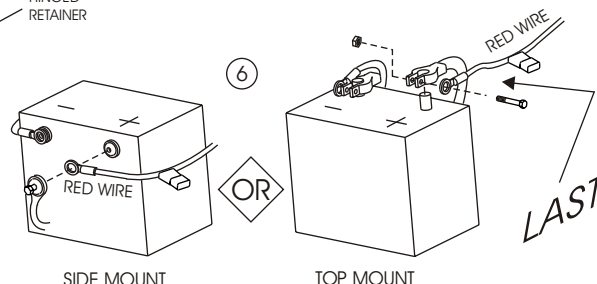
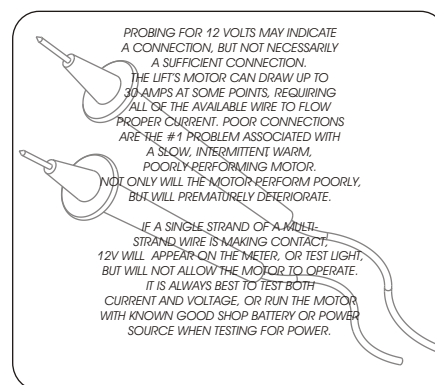
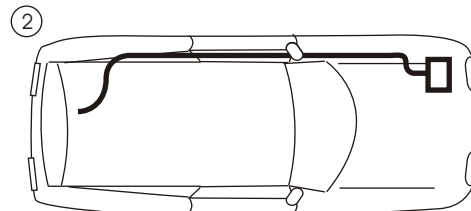


⑥



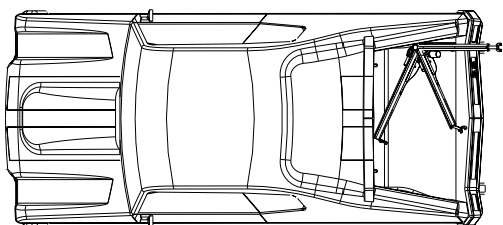
NEVER ATTEMPT TO CONNECT THE HARNESS TO A SECONDARY POWER SOURCE. ALWAYS CONNECT BOTH LEADS DIRECTLY TO THE BATTERY

WHEN THE INSTALLATION REQUIRES THE WIRING HARNESS BE RUN ON THE UNDERSIDE OF THE VEHICLE, ROUTE THE HARNESS AWAY FROM THE EXHAUST SYSTEM, BRAKE LINES, FUEL LINES < GAS TANK, PINCH POINTS, AND SHARP EDGES. LOCATE THE WIRING HARNESS WHERE IT CAN NOT BE SNAGGED BY ROAD DEBRIS





TRIAL FIT PROCEDURE

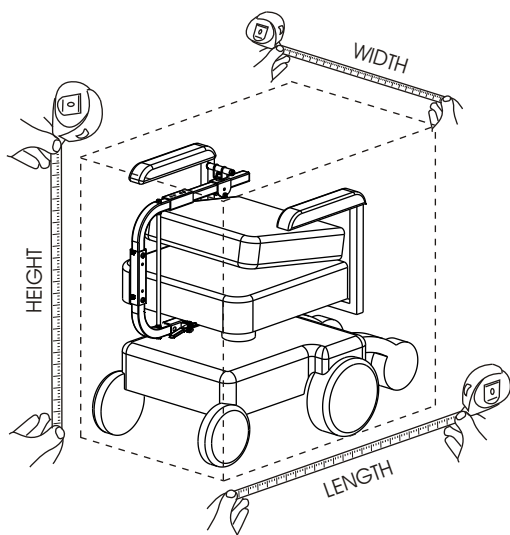


THE AIL-055 WILL REQUIRE 3 HOLES TO BE DRILLED INTO THE VEHICLE, TO BOLT THE LIFT'S BASE TO THE FLOOR. THE POSITIONING OF THE BASE IS VERY IMPORTANT TO A SUCCESSFUL INSTALLATION AND OPERATION OF THIS LIFT.

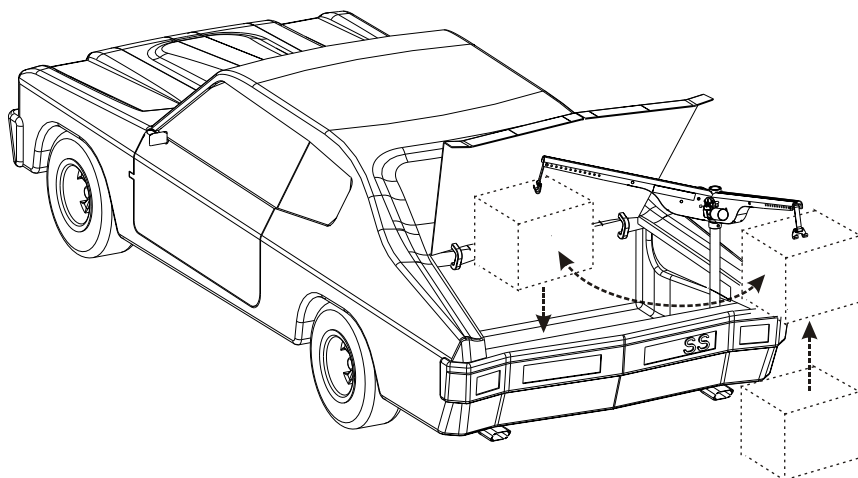
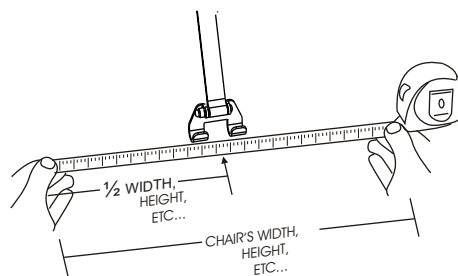
PRIOR TO ANY HOLES BEING DRILLED, IT IS *HIGHLY* RECOMMENDED THAT THE LIFT BE RUN THROUGH ITS RANGE OF MOTION IN A "TRIAL FIT."

WITH THE HELP OF AN ASSISTANT, ASSEMBLE THE LIFT, AND PLACE IT IN THE MOST REAR CORNER OF THE CARGO SPACE CLOSEST TO THE BUMPER. (THIS WILL YIELD THE GREATEST AVAILABLE LOADING AREA)

(PASSENGER SIDE SHOWN. DRIVER'S SIDE IDENTICAL BUT MIRRORRED)

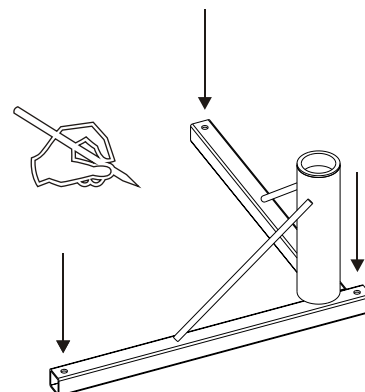


FOLD THE CHAIR OR SCOOTER'S SEAT BACK (or REMOVE SEAT) PREFERABLY WITH DOCKING DEVICE INSTALLED TO ROUGHLY OBSERVE THE CHAIR'S TRANSPORTABLE DIMENSIONS. MEASURE LENGTH, WIDTH, AND HEIGHT



SIMULATE EACH OF THE CHAIR'S DIMENSIONS (LENGTH, WIDTH, and HEIGHT) WHILE RUNNING THE LIFT THROUGH ITS FULL RANGE OF MOTION IN AND OUT OF THE VEHICLE'S CARGO AREA

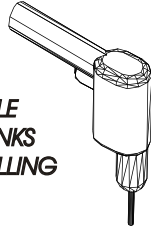
ONCE IT HAS BEEN VERIFIED EACH OF THE HELD MEASUREMENTS DOES NOT INTERFERE WITH THE VEHICLE'S CARGO AREA / OPENING, MARK THE 3 LOCATIONS IN WHICH TO DRILL





ONCE CONFIDENCE HAS BEEN GAINED ON THE POSITION OF THE LIFT, AND THE "TRIAL FIT" PROCEDURE HAS BEEN COMPLETED, THREE 3/8" HOLES WILL NEED TO BE DRILLED IN THE MARKED LOCATIONS

CAUTION! AVOID THE VEHICLE WIRING, FUEL LINES, FUEL TANKS SPARE TIRES, ETC. WHEN DRILLING



INSTALLATION TIP:

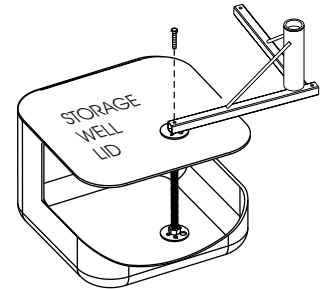
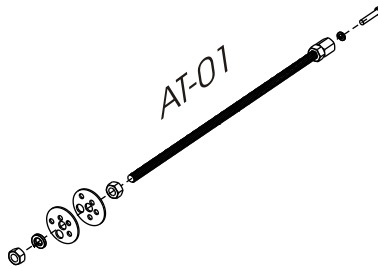
CHOOSE A SAFE LOCATION IN WHICH TO DRILL A SINGLE PILOT HOLE FROM ABOVE IN ONE OF THE 3 MARKED LOCATIONS.

LOOK UNDERNEATH THE VEHICLE AND MEASURE OUT THE SPECIFIED DISTANCE FROM THE PILOT HOLE.

IF ALL IS CLEAR IN THAT AREA, CONTINUE TO DRILL PILOT HOLES IN REMAINING LOCATIONS.

INSPECT ALL THREE PILOT HOLES FROM UNDER THE VEHICLE. IF ALL CLEAR, DRILL 3/8" HOLES IN PILOT LOCATIONS

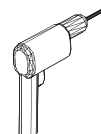
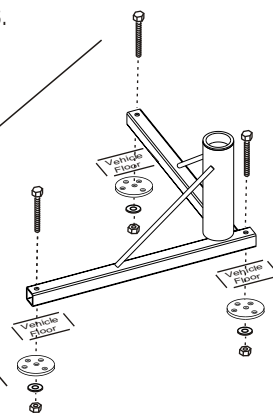
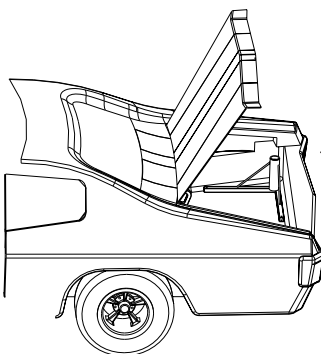
ALL THREAD KIT MAY BE REQUIRED



SOME VEHICLES HAVE STORAGE COMPARTMENTS IN THE REAR CARGO AREA, POTENTIALLY EFFECTING LIFT PLACEMENT. MOST OF THESE CAN BE OVERCOME WITH THE AID OF AN ALL THREAD KIT. SHOWN ABOVE IS THE TYPICAL APPLICATION FOR OVERCOMING THESE STORAGE COMPARTMENTS OR WELLS.

SPARE TIRE STORAGE: SOME VEHICLES STORE THE SPARE TIRE UNDER THE FLOOR OF THE VEHICLE. MAKE SURE THAT THE BASE CAN BE BOLTED THROUGH A STEEL FLOOR OR FRAME.

ONCE HOLES ARE DRILLED, FASTEN BASE TO VEHICLE FLOOR USING SUPPLIED HARDWARE IN THE HARDWARE PACK. BE SURE TO TIGHTEN ALL FASTENERS.



PLACE POST INTO BASE.

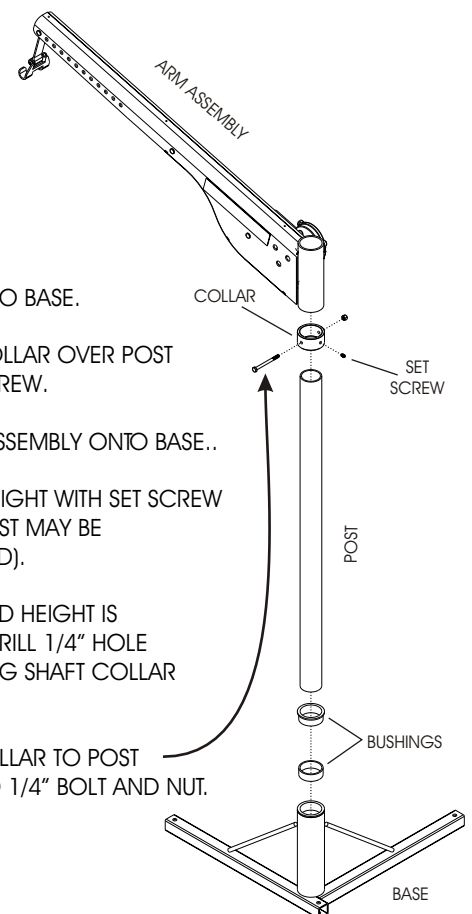
SLIDE SHAFT COLLAR OVER POST
TIGHTEN SET SCREW.

SLIP-ON ARM ASSEMBLY ONTO BASE..

ADJUST ARM HEIGHT WITH SET SCREW
AS NEEDED (POST MAY BE
CUT IF REQUIRED).

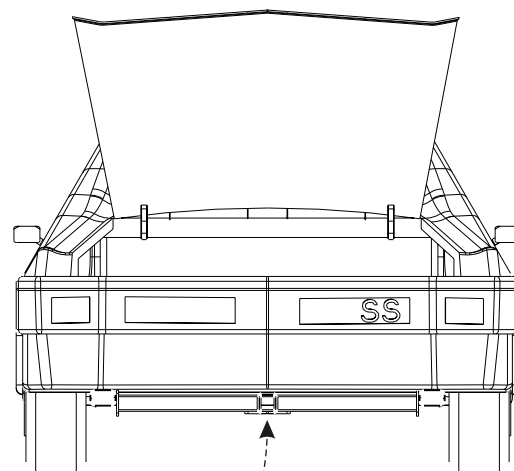
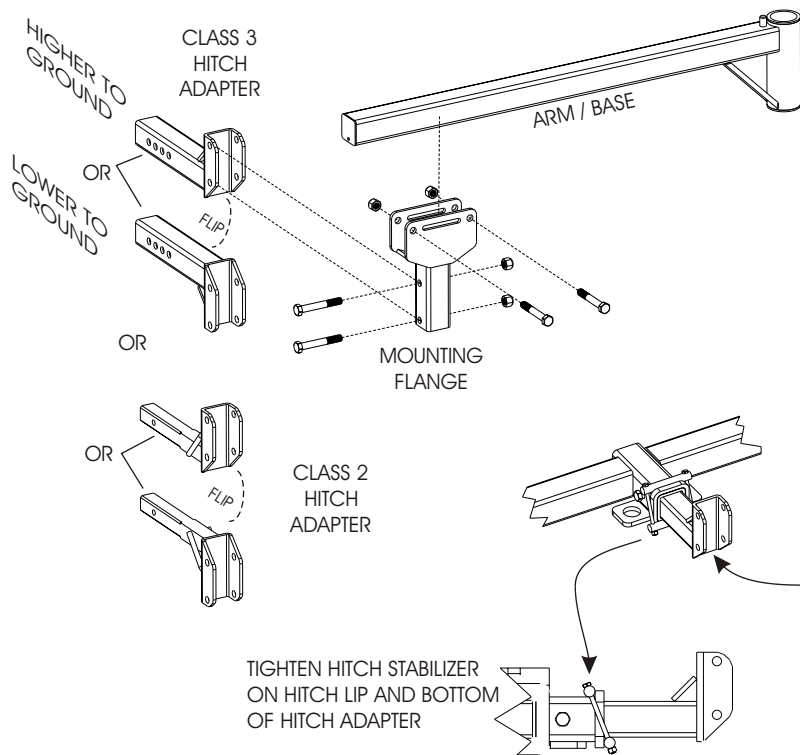
ONCE REQUIRED HEIGHT IS
DETERMINED, DRILL 1/4" HOLE
THRU POST USING SHAFT COLLAR
AS A GUIDE.

BOLT SHAFT COLLAR TO POST
USING SUPPLIED 1/4" BOLT AND NUT.





ASSEMBLE HITCH ADAPTER
TO MOUNTING FLANGE AND
BOLT ARM / BASE TO MOUNTING FLANGE
(LEAVE LOOSE FOR ADJUSTMENT)



PLACE POST INTO BASE
SLIP FRAME ONTO POST

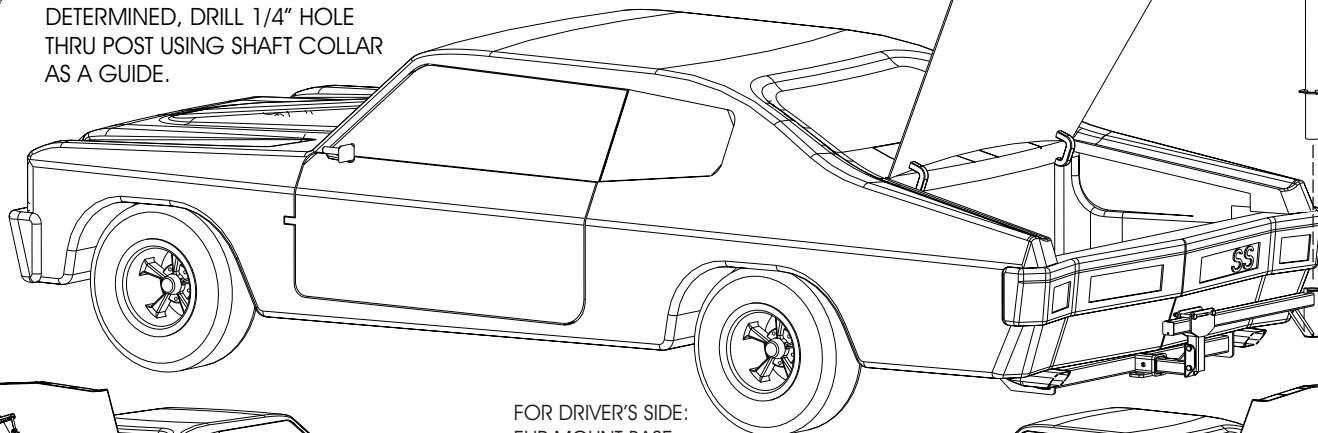
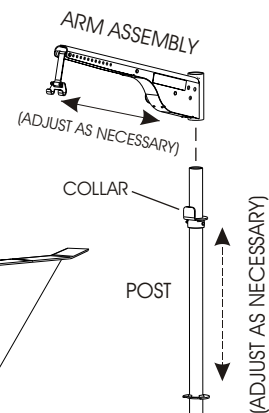
ADJUST ARM HEIGHT WITH SET SCREW
AS NECESSARY..

ONCE REQUIRED HEIGHT AND ROTATION IS
DETERMINED, DRILL 1/4" HOLE
THRU POST USING SHAFT COLLAR
AS A GUIDE.

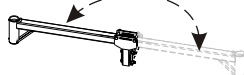


BOLT SHAFT COLLAR TO POST
USING SUPPLIED 1/4" BOLT AND NUT.

ONCE ALL ADJUSTMENTS
ARE COMPLETE,
TIGHTEN ALL FASTENERS



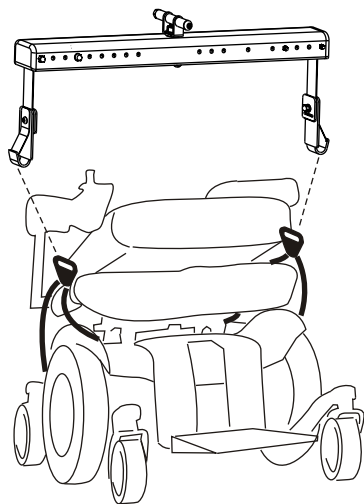
FOR DRIVER'S SIDE:
FLIP MOUNT BASE,
SO ARM IS ON
OPPOSING SIDE.



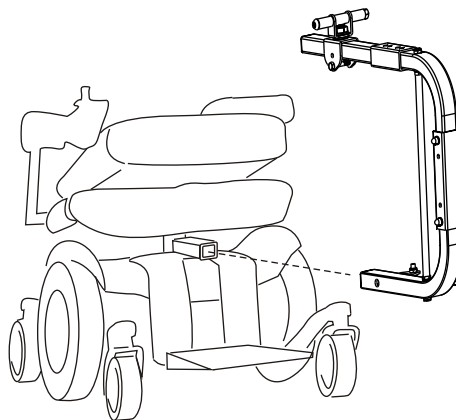


The Docking Device is the interface between the lift and the Chair / Scooter.

Most chairs / scooters can be lifted either by the center seat post or the 4 post seat frame.



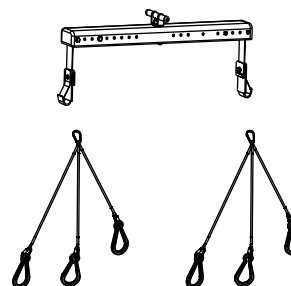
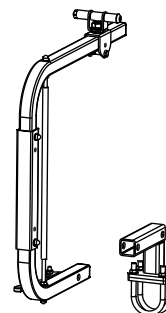
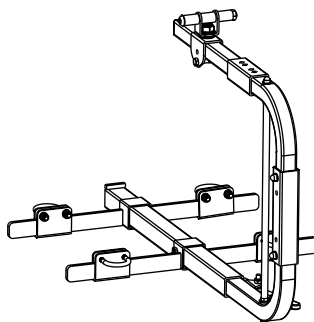
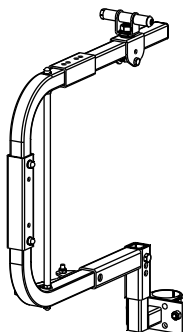
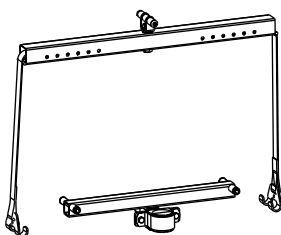
DD-21
Spreader Bar &
Bridles

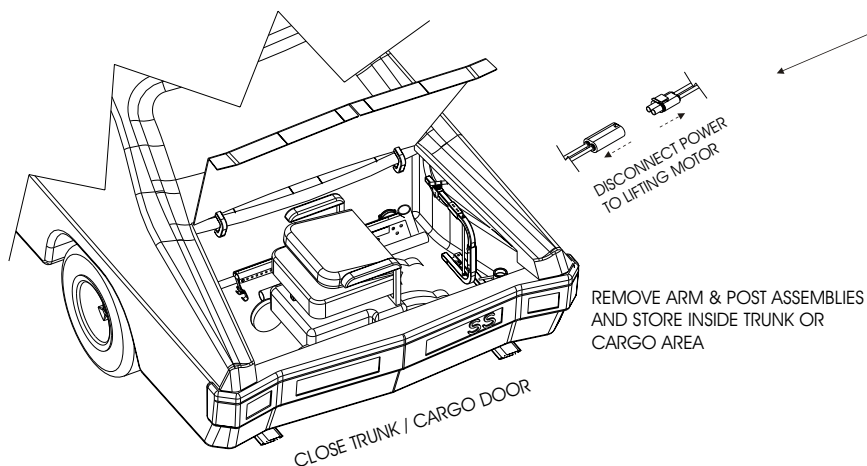
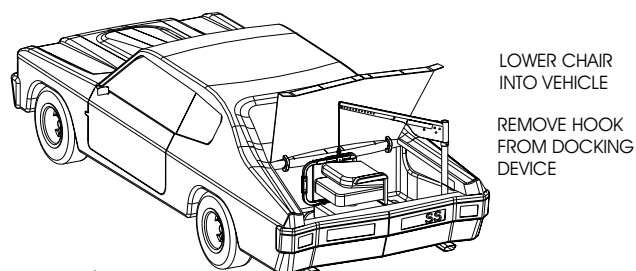
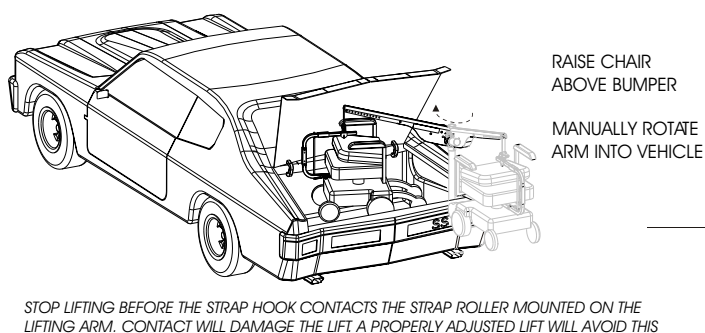
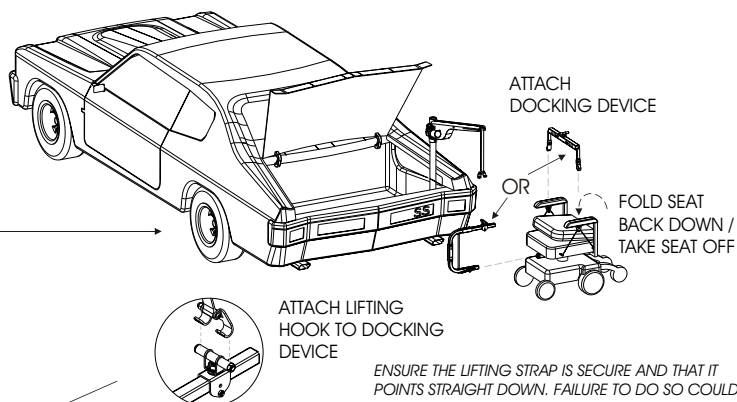
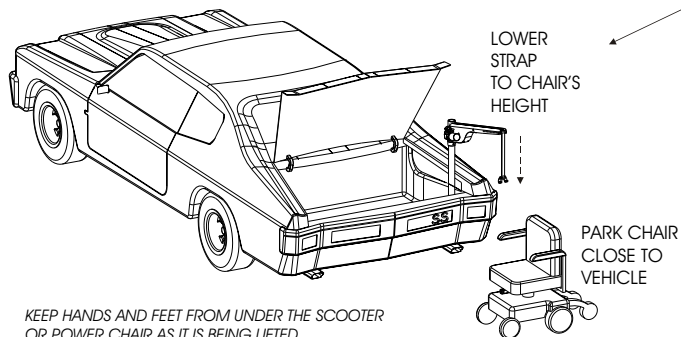
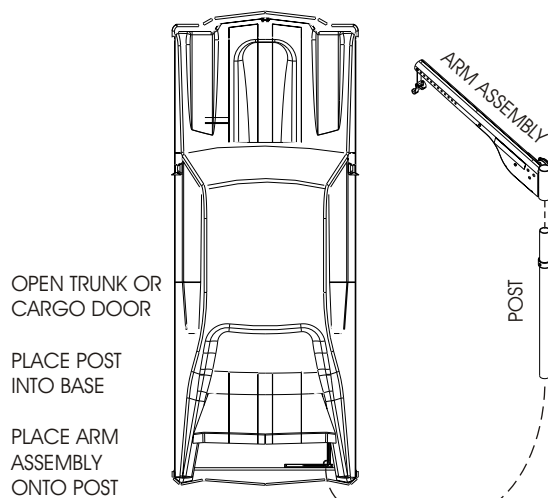
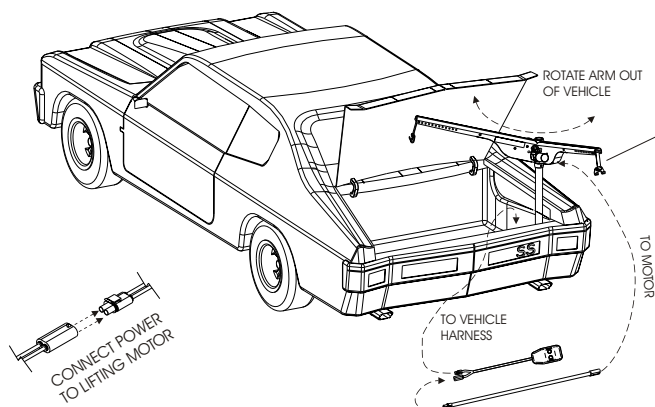


DD-19
C-Arm

Although most chairs / scooters can be lifted by the above Docking Devices, Many specific devices exist making the application even easier.

Please consult the instruction provided with your Docking Device, or contact our technical service department to find out exactly how this device is right for you.





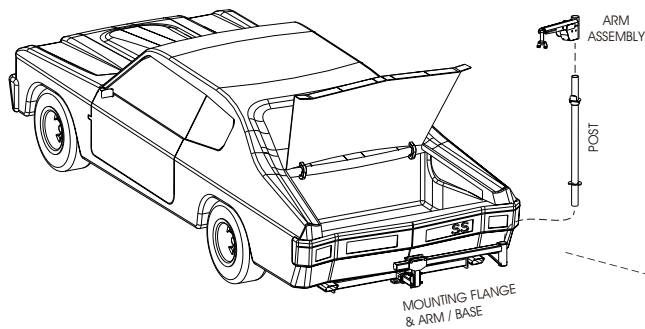
ELIMINATE EXCESS STRAP BY PRESSING THE "UP" BUTTON UNTIL THE HOOK IS ABOUT 1 INCH FROM THE TOP OF THE LIFTING ARM. MAKING DIS-ASSEMBLY EASIER.

IF PREPARATIONS ARE NEEDED TO SECURE THE SCOOTER OR CHAIR FOR TRANSPORT SUCH AS PARKING BRAKES OR WHEEL CHOCKS, THE DEALER SHOULD INSTRUCT OPERATORS ON HOW.

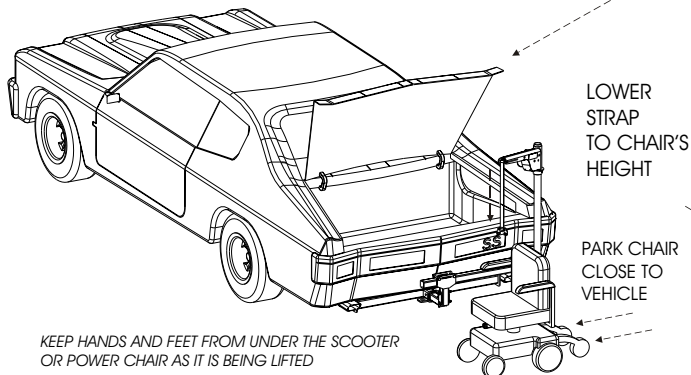
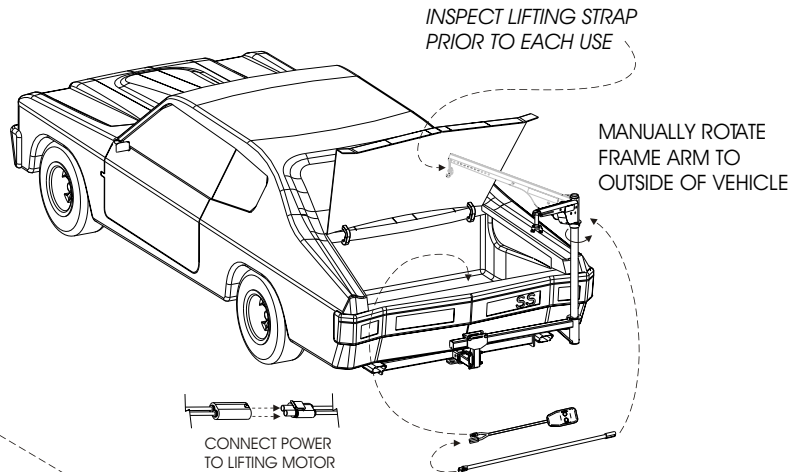
DUE TO THE WIDE VARIETY OF SCOOTERS, POWER CHAIRS, AND VEHICLES, YOUR DEALER MAY OFFER A DIFFERENT METHOD FOR LOADING AND UNLOADING YOUR MOBILITY DEVICE. PLEASE FOLLOW THE GUIDELINES THEY HAVE OFFERED.

UNLOADING IS THE REVERSE OF LOADING.

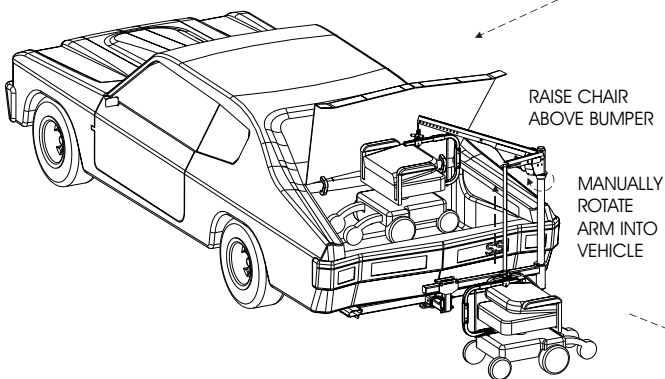
AL-065 OPERATION



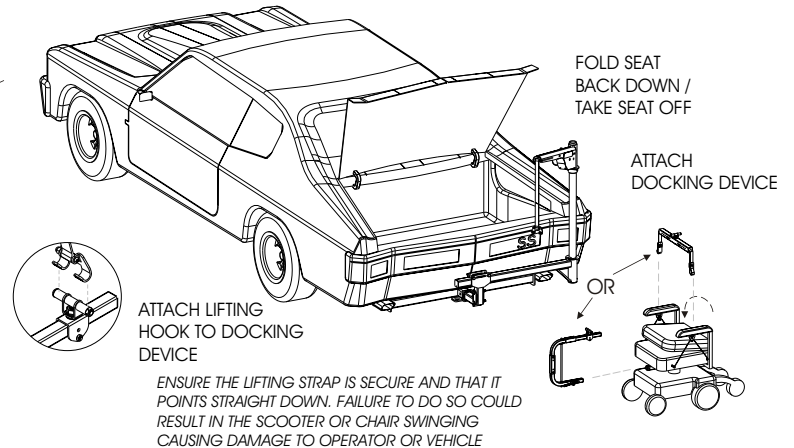
OPEN TRUNK OR CARGO DOOR
INSERT POST INTO ARM / BASE
PLACE ARM ASSEMBLY ONTO POST



KEEP HANDS AND FEET FROM UNDER THE SCOOTER OR POWER CHAIR AS IT IS BEING LIFTED

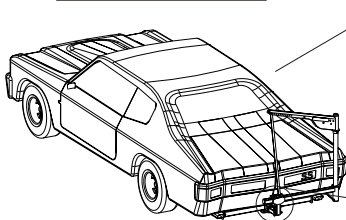


STOP LIFTING BEFORE THE STRAP HOOK CONTACTS THE STRAP ROLLER MOUNTED ON THE LIFTING ARM. CONTACT WILL DAMAGE THE LIFT. A PROPERLY ADJUSTED LIFT WILL AVOID THIS

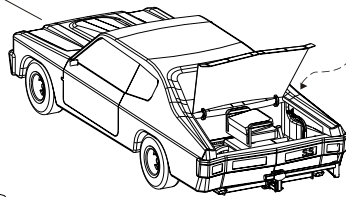


TRAVEL w/ LIFT ASSEMBLED

UN-ASSEMBLE / STORE INSIDE

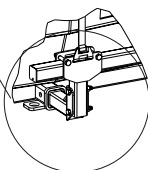


OR



STRAP HOOK TO MOUNT FLANGE

RUN STRAP UP TILL TIGHT



ALWAYS DISCONNECT POWER TO LIFTING MOTOR BEFORE TRAVEL

REMOVE ARM ASSEMBLY & POST AND STORE TRUNK OR CARGO AREA

ELIMINATE EXCESS STRAP BY PRESSING THE "UP" BUTTON UNTIL THE HOOK IS ABOUT 1 INCH FROM THE TOP OF THE LIFTING ARM

IF PREPARATIONS ARE NEEDED TO SECURE THE SCOOTER OR CHAIR FOR TRANSPORT SUCH AS PARKING BRAKES OR WHEEL CHOCKS, THE DEALER SHOULD INSTRUCT OPERATORS ON HOW.

DUE TO THE WIDE VARIETY OF SCOOTERS, POWER CHAIRS, AND VEHICLES, YOUR DEALER MAY OFFER A DIFFERENT METHOD FOR LOADING AND UNLOADING YOUR SCOOTER. PLEASE FOLLOW THE GUIDELINES THEY HAVE OFFERED

UNLOADING IS THE REVERSE OF LOADING



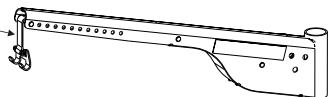
SAFETY:

CAUTION: DO NOT OPERATE THIS LIFT UNTIL YOUR DEALER HAS SATISFACTORILY INSTRUCTED YOU IN THE PROPER OPERATION OF THE LIFT.

YOUR HARMAR INSIDE LIFT HAS BEEN ENGINEERED AND DESIGNED FOR YEARS OF TROUBLE FREE USE. ALTHOUGH, WITH EVERYDAY USE, SOME PARTS MAY BECOME LOOSE OR WORN. IMPORTANT! CHECK REGULARLY FOR ANY WORN, LOOSE, OR DAMAGED PARTS OF YOUR LIFT. IF ANYTHING IS OBSERVED, **DO NOT USE THE LIFT!** CONTACT YOUR DEALER OR INSTALLER OF THE LIFT FOR REPAIRS TO BE MADE. FAILURE TO ACT MAY CAUSE SEVERE INJURY

YOUR HARMAR INSIDE LIFT SHOULD ONLY BE USED FOR THE LOADING AND UNLOADING OF SCOOTERS AND POWER WHEELCHAIRS FOR WHICH IT IS DESIGNED. IF YOUR PARTICULAR APPLICATION (VEHICLE & SCOOTER/CHAIR) CHANGES (ex. BUY A NEW CAR / UPGRADE TO A NEW POWER CHAIR) PLEASE CONSULT YOUR INSTALLER OR DEALER, AS THE ORIGINAL EQUIPMENT MAY NOT CONFIGURE THE SAME. DO NOT ADD TO OR MODIFY ANY PART OF THE LIFT SYSTEM WITHOUT FIRST CONSULTING THE MANUFACTURER OF THE LIFT. ANY MODIFICATIONS MAY VOID ANY WARRANTIES AS WELL AS THE STRUCTURAL INTEGRITY OF THE LIFT.

ALWAYS CHECK THE LIFTING STRAP BEFORE EACH USE FOR DAMAGE OR WEAR



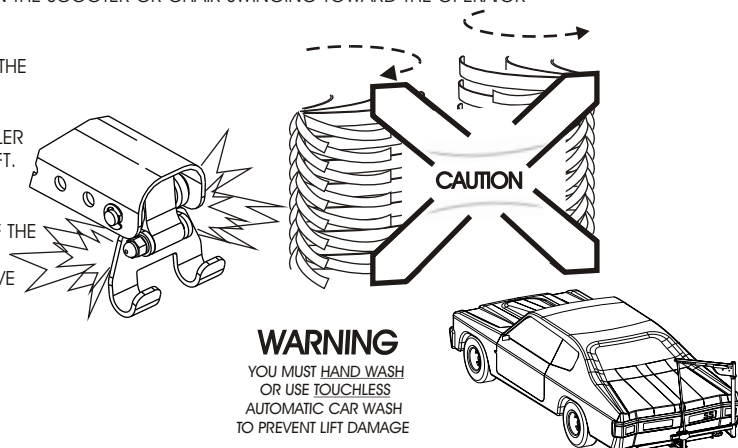
IF THERE IS ANY SIGN OF TEARING / LOOSE THREADS / DAMAGE / WEAR **DO NOT USE THE LIFT.** SEVERE DAMAGE TO CHAIR / SCOOTER / VEHICLE AND PERSONAL INJURY MAY OCCUR. PLEASE CONTACT YOUR DEALER OR INSTALLER, AND HAVE THE STRAP REPLACED IMMEDIATELY.

CAUTION: WHEN ATTACHING THE STRAP HOOK TO YOUR CHAIR / SCOOTER, INSURE THE LIFTING STRAP IS SECURE AND TAUGHT AND THAT IT POINTS STRAIGHT DOWN BEFORE LIFTING. FAILURE TO DO SO COULD RESULT IN THE SCOOTER OR CHAIR SWINGING TOWARD THE OPERATOR OR THE VEHICLE.

CAUTION: WHEN USING THE LIFT, KEEP YOUR HANDS AND FEET FROM UNDER THE CHAIR / SCOOTER AS IT IS BEING LOADED OR UNLOADED.

CAUTION: STOP LIFTING BEFORE THE STRAP HOOK CONTACTS THE STRAP ROLLER MOUNTED ON THE LIFTING ARM. CONTACT WILL RESULT IN DAMAGE TO THE LIFT. A PROPERLY ADJUSTED AND OPERATED LIFT WILL AVOID THIS

CAUTION: INSURE THE CHAIR / SCOOTER IS FIRMLY SITTING ON THE FLOOR OF THE VEHICLE AND NOT SUSPENDED BY THE LIFT DURING TRANSPORTATION. IF THE SCOOTER / CHAIR IS NOT FIRMLY ON THE FLOOR OF THE VEHICLE, IT MAY MOVE DURING TRANSPORTATION CAUSING DAMAGE TO THE LIFT, TO THE VEHICLE, TO THE SCOOTER / CHAIR, OR TO THE PASSENGERS.



MAINTENANCE:

YOUR HARMAR INSIDE LIFT HAS BEEN DESIGNED AND ENGINEERED TO BE AS TROUBLE FREE AS POSSIBLE TO THE OWNER. BUT, AS WITH ANY MECHANICAL DEVICE, REGULAR CARE SHOULD BE GIVEN WHILE OWNING AN USING THIS DEVICE.

MAINTENANCE IS NO EXCEPTION.

WE RECOMMEND THAT DEALERS SCHEDULE A PREVENTATIVE MAINTENANCE INSPECTION AT LEAST ONCE A YEAR ON MOTORS, LIFT FRAME, WIRING HARNESSSES, AND ALL MOVING PARTS OF THE LIFT.

CHECK FOR PAINT CHIPS AND TOUCH UP AND BARE METAL WITH A GOOD GLOSS BLACK ENAMEL OR LACQUER TO INHIBIT RUST. THIS MAY BE NECESSARY MORE FREQUENTLY WHEN SUBJECTED TO SALT AIR OR ROAD SALT.

ALWAYS CHECK THE LIFTING STRAP BEFORE EACH USE. IF ANY WEAR OR DAMAGE IN NOTICED **DO NOT USE THE LIFT!** CONTACT THE DEALER OR INSTALLER FOR REPAIR. FAILURE TO DO SO WILL RESULT SEVERE INJURY OR DAMAGE.

HAND CONTROL UNITS SHOULD BE PROPERLY STORED INSIDE THE VEHICLE WHENEVER POSSIBLE. IF LIFT IS INSTALLED IN THE BACK OF A PICK-UP TRUCK, WE STRONGLY RECOMMEND UN-PLUGGING THE CONTROL IN BETWEEN USES, AND STORING IN THE CAB. EXPOSURE TO WEATHER IS OK, BUT RAIN FLOODING THE TRUCK BED, AND THE HAND CONTROLLER BEING SUBMERGED IN WATER, COULD CAUSE THE CONTROLLER TO FAIL.

WARRANTY:

THIS LIFT COVERED BY A THREE YEAR FACTORY WARRANTY ON MATERIALS AND WORKMANSHIP. CONTACT YOUR LOCAL DEALER FOR MORE INFORMATION OR GO TO WWW.HARMAR.COM

PROBLEM: LIFT WILL NOT OPERATE,
OPERATES SLOWLY or OPERATES INTERMITTENTLY.

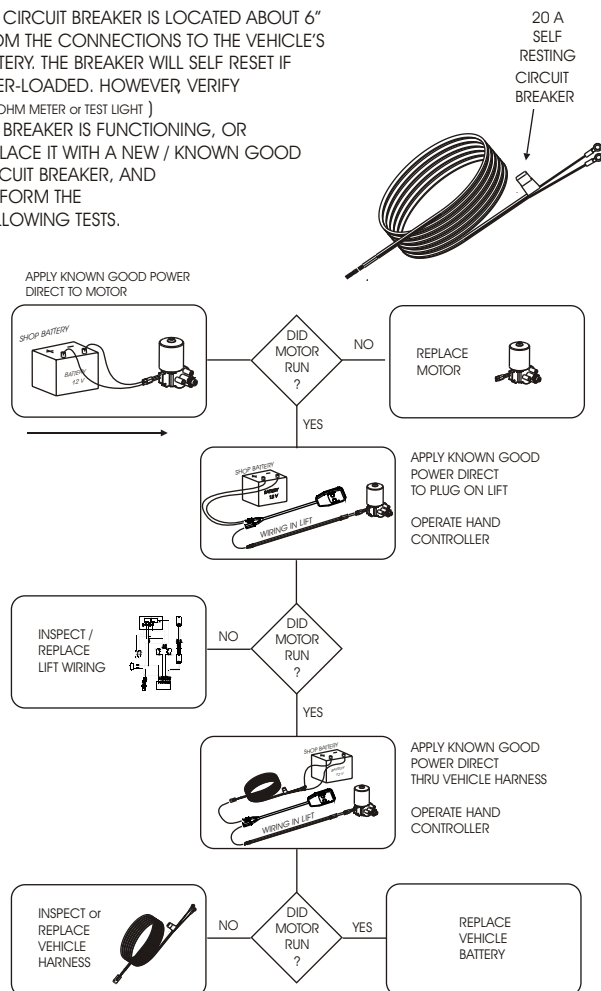
REASON: BAD ELECTRICAL CONNECTIONS / CIRCUIT BREAKER

PROCEDURE:

CHECK / CLEAN ALL CONNECTIONS THAT MIGHT BE LOOSE OR DIRTY
THIS IS THE #1 CAUSE OF A POORLY PERFORMING LIFT.
THE MOTOR ON THE LIFT REQUIRES QUALITY ELECTRICAL CONNECTIONS
TO OPERATE AT FULL CAPACITY. ANY BREAK IN THE WIRING WILL
SLOW DOWN THE MOTOR, OR CAUSE IT TO OPERATE INTERMITTENTLY
WHICH IN TURN WILL PREMATURELY DETERIORATE THE MOTOR.

THE LIFT'S VEHICLE POWER HARNESS RUNNING THROUGH OR UNDER
THE VEHICLE IS SUBJECT TO ROAD DEBRIS, AND RUBBING AGAINST THE
VEHICLE'S FRAME, CAUSING A SHORT. INSPECT THE FULL LENGTH
OF THE HARNESS TO BE SURE THE JACKET OF INSULATION IS NOT TORN.

THE CIRCUIT BREAKER IS LOCATED ABOUT 6"
FROM THE CONNECTIONS TO THE VEHICLE'S
BATTERY. THE BREAKER WILL SELF RESET IF
OVER-LOADED. HOWEVER VERIFY
(w/ OHM METER or TEST LIGHT)
THE BREAKER IS FUNCTIONING, OR
REPLACE IT WITH A NEW / KNOWN GOOD
CIRCUIT BREAKER, AND
PERFORM THE
FOLLOWING TESTS.



PROBLEM: LIFTING STRAP OPERATES IN REVERSE

REASON: BUTTON WAS HELD TOO LONG AND UNWOUND LIFTING STRAP
LIKE A YO-YO, THE LIFTING STRAP WOUND IN REVERSE

PROCEDURE: PRESS WHICH EVER BUTTON EXTENDS STRAP, AND
CONTINUE TO HOLD UNTIL STRAP RETURNS TO PROPER DIRECTION

PROBLEM: SCOOTER OR CHAIR TIPS FRONT OR BACK WHILE BEING LIFTED

REASON: CHAIR or SCOOTER IS BEING LIFTED OFF CENTER

PROCEDURE: ADJUST FOR CENTER OF GRAVITY ON DOCKING DEVICE. CHECK TO
SEE IF PROPER DOCKING DEVICE IS BEING USED

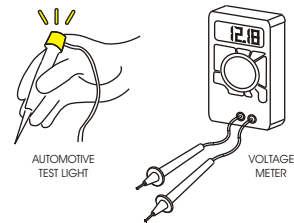
PROBLEM: LIFTING ARM IS HARD TO ROTATE

REASON: DRY / DIRTY BUSHINGS

PROCEDURE: CLEAN AND LUBRICATE GREY BUSHINGS IN BASE WITH
WHITE/LITHIUM GREASE OR EQUIV.

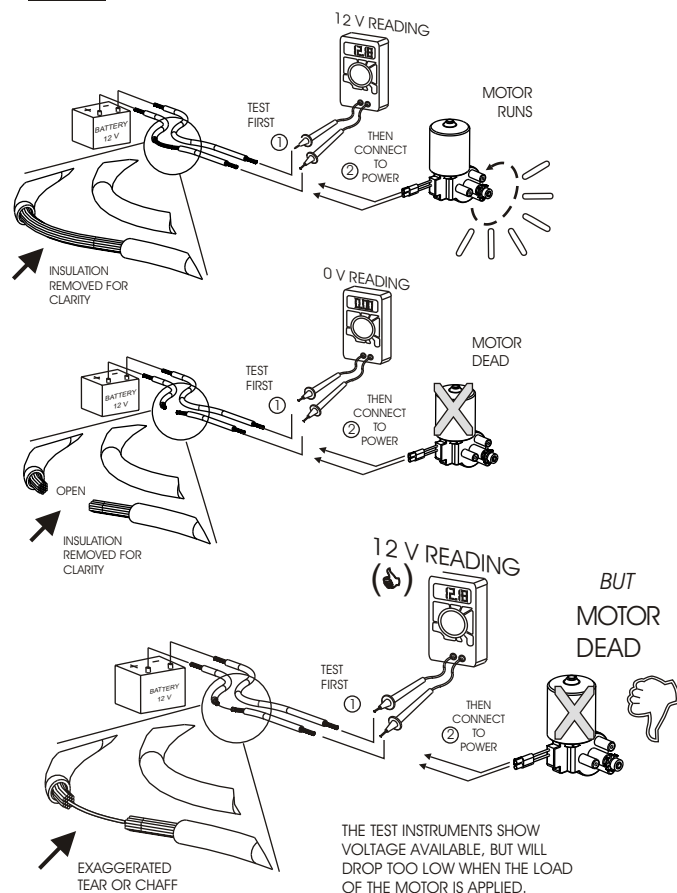
THIS SECTION IS RESERVED
FOR THE INSTALLER / DEALER
HARMAR DOES NOT RECOMMEND
THESE PROCEDURES BE ATTEMPTED
BY ANYONE WITHOUT PROPER
KNOWLEDGE OF AUTOMOTIVE
ELECTRICAL CIRCUITRY

BE CAREFUL WHEN TROUBLESHOOTING WITH A TEST LIGHT, OR
VOLTAGE METER. THEY MAY GIVE FALSE INDICATIONS



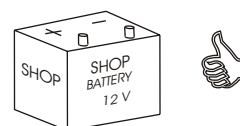
THESE INSTRUMENTS WILL DETECT VOLTAGE, BUT MAY NOT
INDICATE A TEAR OR POOR CONNECTION IN THE WIRING

EXAMPLE:



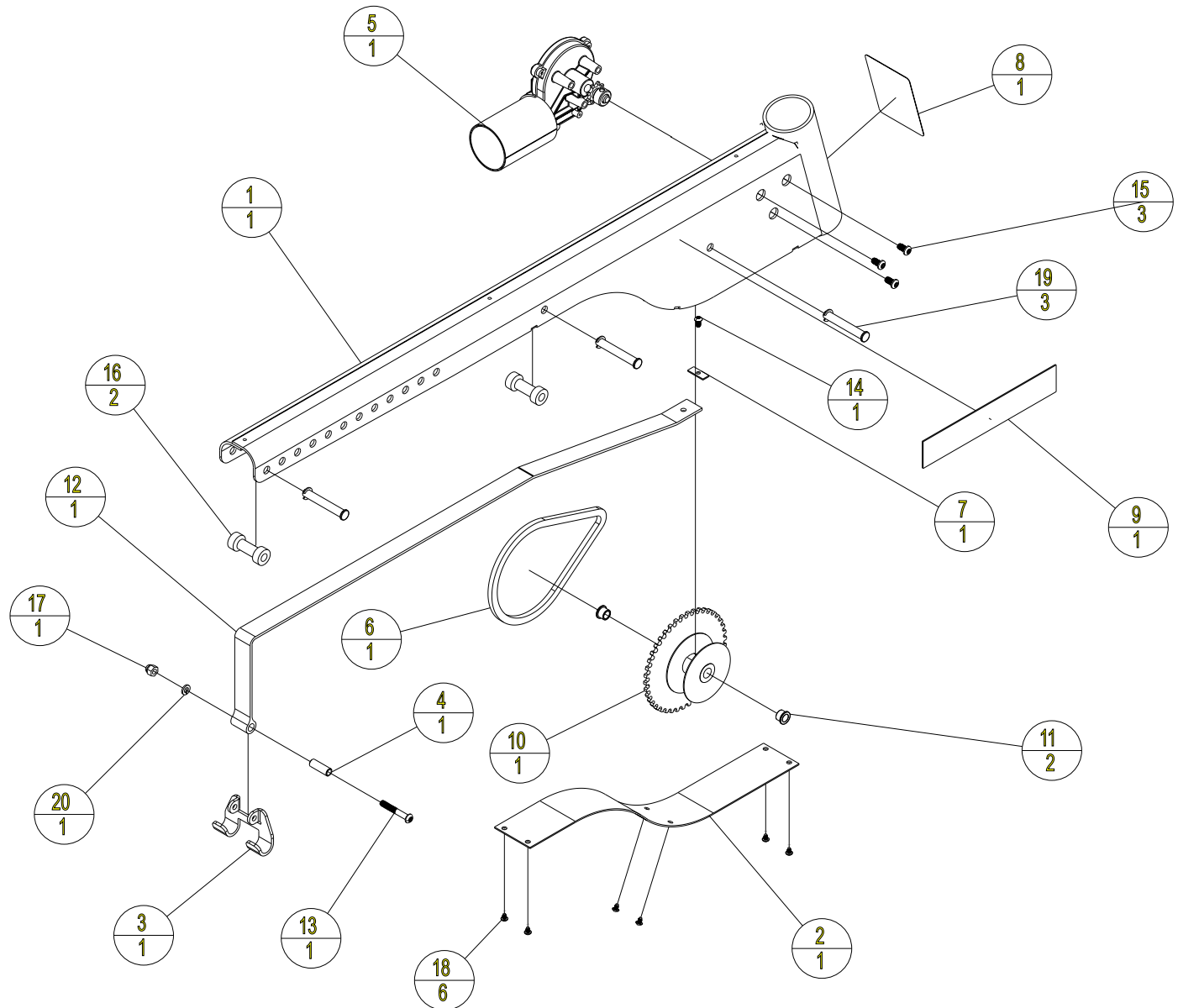
BE CAREFUL WHEN TROUBLESHOOTING WITH A TEST LIGHT, OR
VOLTAGE METER. THEY MAY GIVE FALSE INDICATION AS SHOWN
ABOVE. THEY WILL ONLY INDICATE THERE IS SOME WIRE
CONNECTION--NOT NECESSARILY-ENOUGH.

HARMAR STRONGLY RECOMMENDS TROUBLESHOOTING
ELECTRICAL PROBLEMS WITH KNOW GOOD / FULLY CHARGED
12 V AUTOMOTIVE BATTERY or KNOW GOOD / FULLY
CHARGED POWER CHAIR/SCOOTER BATTERY





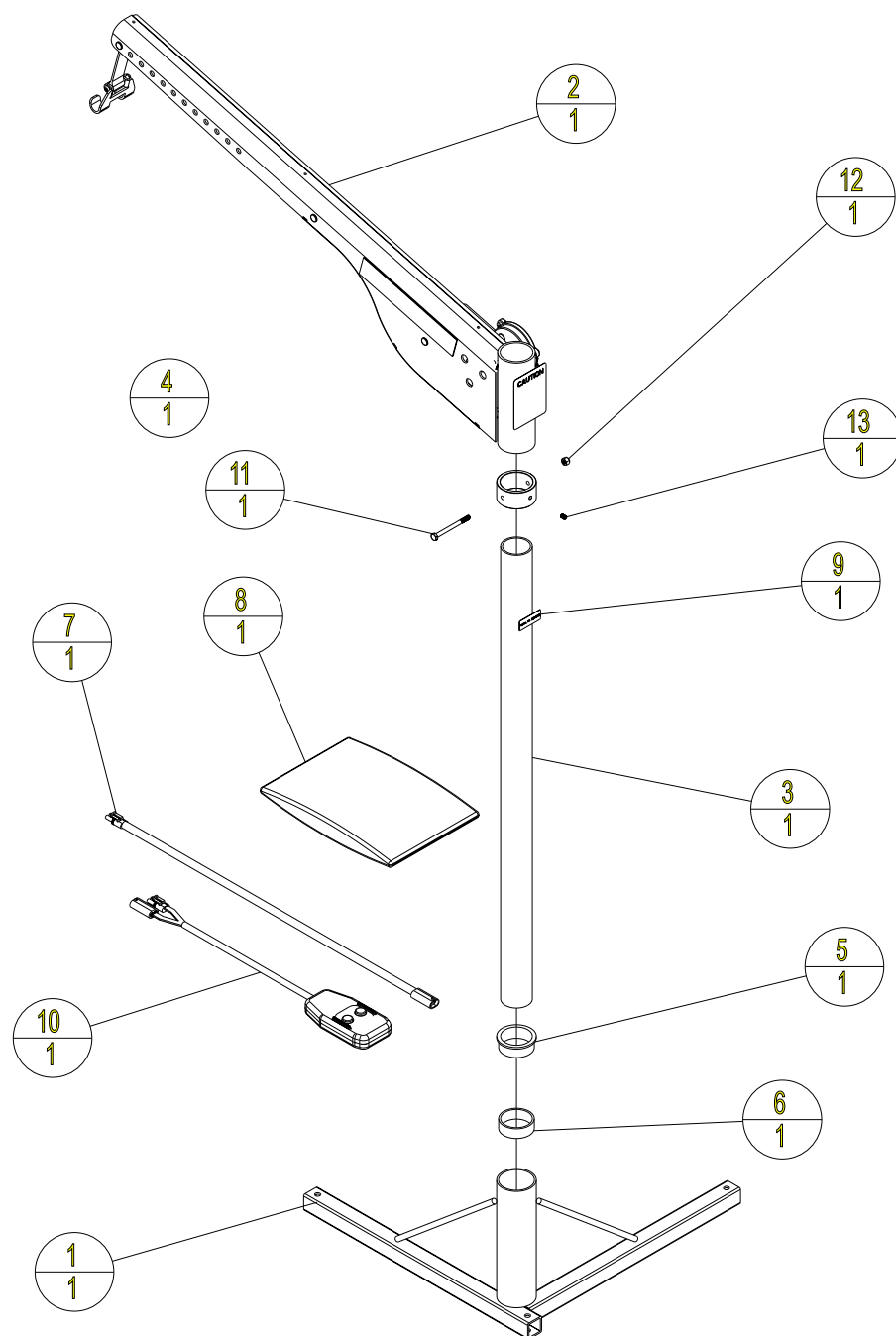
AL 055 / 065 ARM ASSEMBLY



ASSEMBLY PARTS				ASSEMBLY PARTS			
ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	261-ZB05-C	HOIST HOUSING	11	2	ALA21410	FLANGE BUSHING, 3/8X1/2X3/8, BRONZE
2	1	570-ZB01-C	HOIST HOUSING COVER	12	1	ALA67997	LIFTING STRAP
3	1	580-ZB01-C	DETACHABLE HOOK	13	1	BHCS-0_25-20-1_75-SS	BUTTON HEAD, 1/4-20 x 1.75, SS
4	1	581-ZB01-C	HOOK SLEEVE	14	1	BHCS-10-32-0_37-BO	BUTTON HEAD, 10-32 x 3/8, BLACK OXIDE
5	1	700-ZB01-A	ANK. LIFTING MOTOR	15	3	BHCS-M6-1_00-16-SS	BUTTON HEAD, M6-1 X 16MM, SS
6	1	ALA21020	SPOOL CHAIN	16	2	H225402	AL215 & AL225 ROLLER
7	1	ALA21055	STRAP TAB	17	1	NUT-0_25-20-ACORN-NI	ACORN NUT, 1/4-20, NI
8	1	ALA21094	STICKER, "CAUTION"	18	6	PHTS-8-32-0_25-BZ	PAN HEAD - THREAD FORMING, 8-32 X 0.25, BZ
9	1	ALA21095	STICKER, INSIDE LIFTS	19	3	PIN-0_37-2_50-CL-Z	CLEVIS PIN W/IE-CLIP, 3/8 X 2.50, ZINC
10	1	ALA214-PLT	SPOOL	20	1	WASH-0_25-0_50-0_06-SL-Z	1/4" SPLIT LOCK WASHER



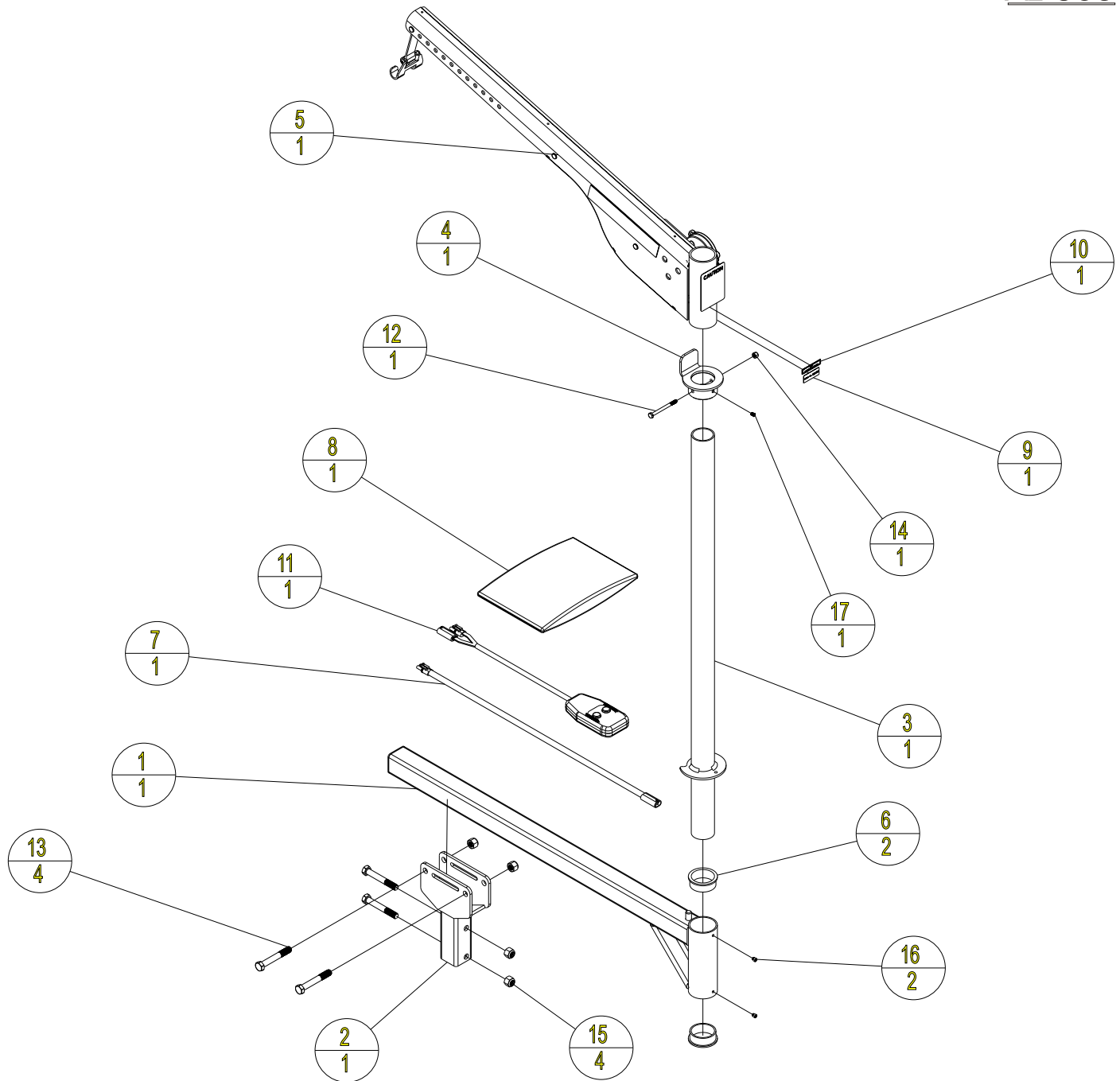
AL-055



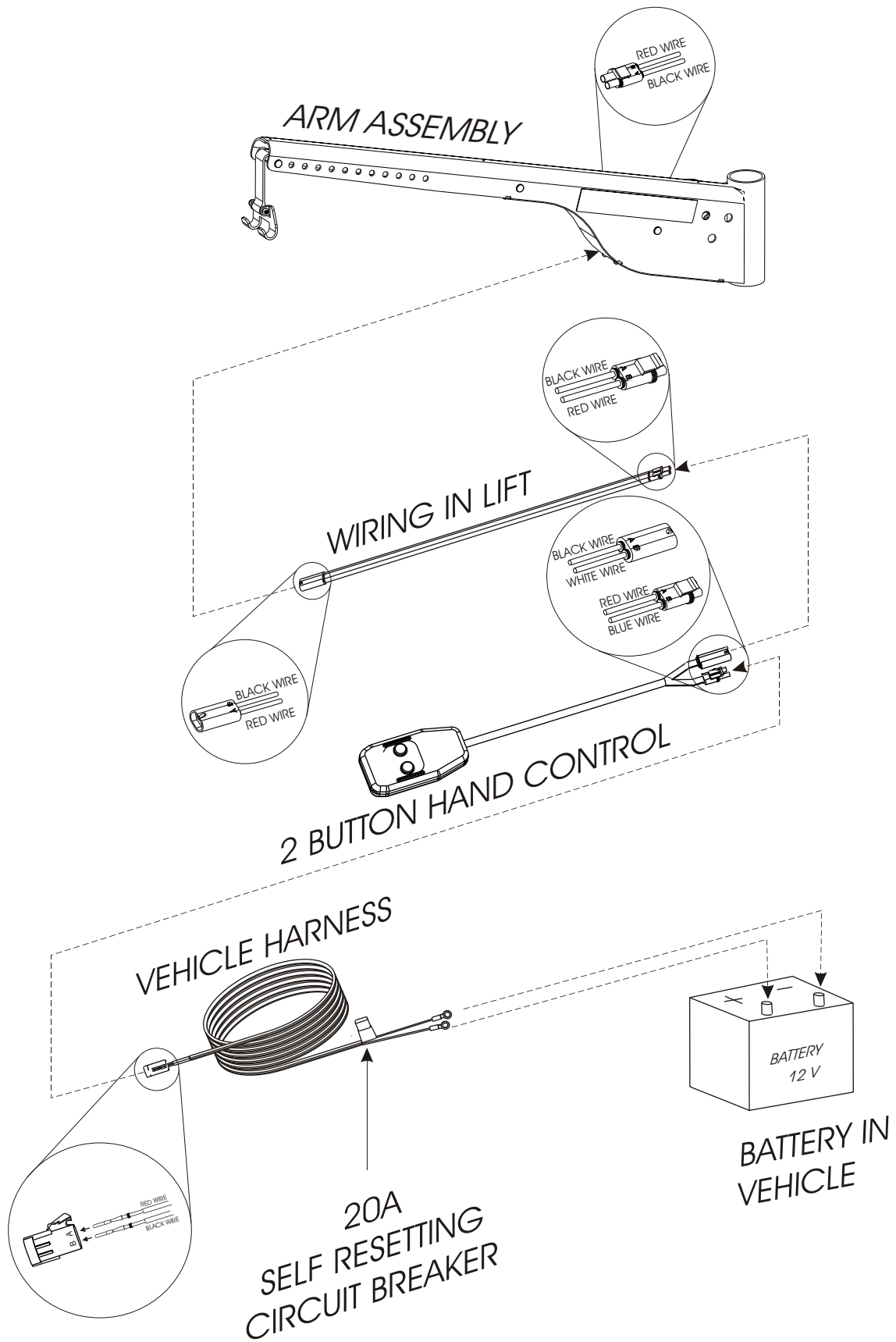
ASSEMBLY PARTS				ASSEMBLY PARTS			
ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	201-ZB05-C	BASE	8	1	ALA280	HARDWARE PACK
2	1	260-ZB05-A	HOIST ASSEMBLY	9	1	ALA99995	LABEL, SERIAL NUMBER
3	1	541-1B05-C	VERTICAL POST	10	1	H20000	2 BUTTON HAND CONTROL
4	1	542-1B05-C	SHAFT COLLAR TUBE	11	1	HHCS-0_25-28-3_00-Z	HEX HEAD, 1/4-28 X 3.00, ZINC
5	1	ALA05010	FLANGE BEARING 2 INCH	12	1	NUT-0_25-28-NYLOCK-Z	NUT, NYLOCK, 1/4-28, ZINC
6	1	ALA05011	BUSHING 2 INCH	13	1	SSCP-0_25-28-0_375	SET SCREW, 1/4-28 X 0.375
7	1	ALA06550	HARNESS				



AL-065



ASSEMBLY PARTS				ASSEMBLY PARTS			
ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	201-1B06-C	MOUNTING ARM	10	1	H065411	AL065 PATENT STICKER
2	1	210-2B06-C	MOUNTING FLANGE	11	1	H20000	2 BUTTON HAND CONTROL
3	1	241-1B06-C	VERTICAL POST	12	1	HHCS-0_25-28-3_00-Z	HEX HEAD, 1/4-28 X 3.00, ZINC
4	1	245-1B06-C	SHAFT COLLAR	13	4	HHCS-0_50-13-3_50-Z	HEX HEAD, 1/2-13 X 3.50, ZP
5	1	260-2B05-A	HOIST ASSEMBLY	14	1	NUT-0_25-28-NYLOCK-Z	NUT, NYLOCK, 1/4-28, ZINC
6	2	ALA05010	FLANGE BEARING 2 INCH	15	4	NUT-0_50-13-NYLOCK-Z	NYLOCK NUT, 1/2-13, ZINC
7	1	ALA06550	HARNESS	16	2	SHCS-10-24-0_18-N	SOCKET HEAD, 10-24 X 0.188, NYLON
8	1	ALA068	HARDWARE PACK	17	1	SSCP-0_25-28-0_375	SET SCREW, 1/4-28 X 0.375
9	1	ALA9895	LABEL, SERIAL NUMBER				





Service Description:

Service Date:

Service Performed By:

Service Description:

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THANK YOU FOR MAKING HARMAR AMERICA'S LEADER IN LIFTS AND RAMPS