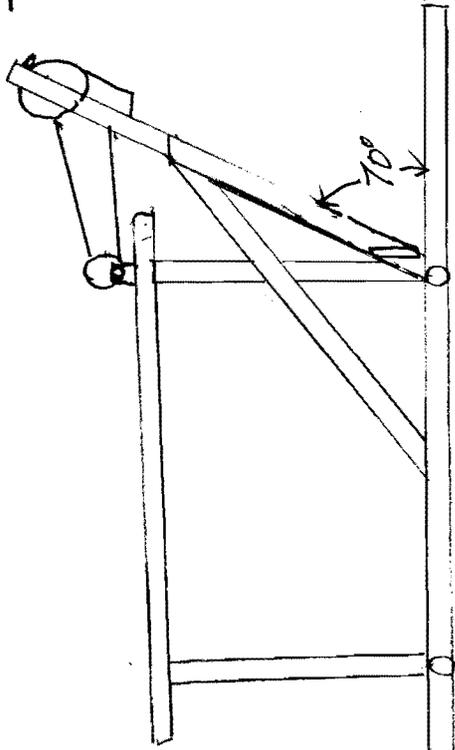
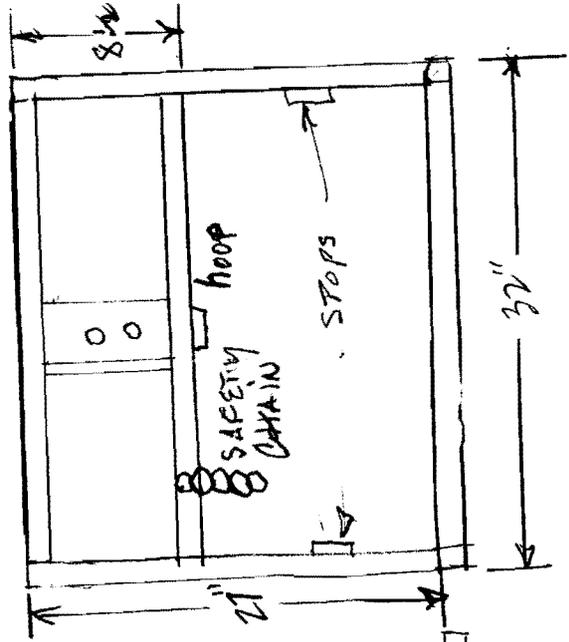
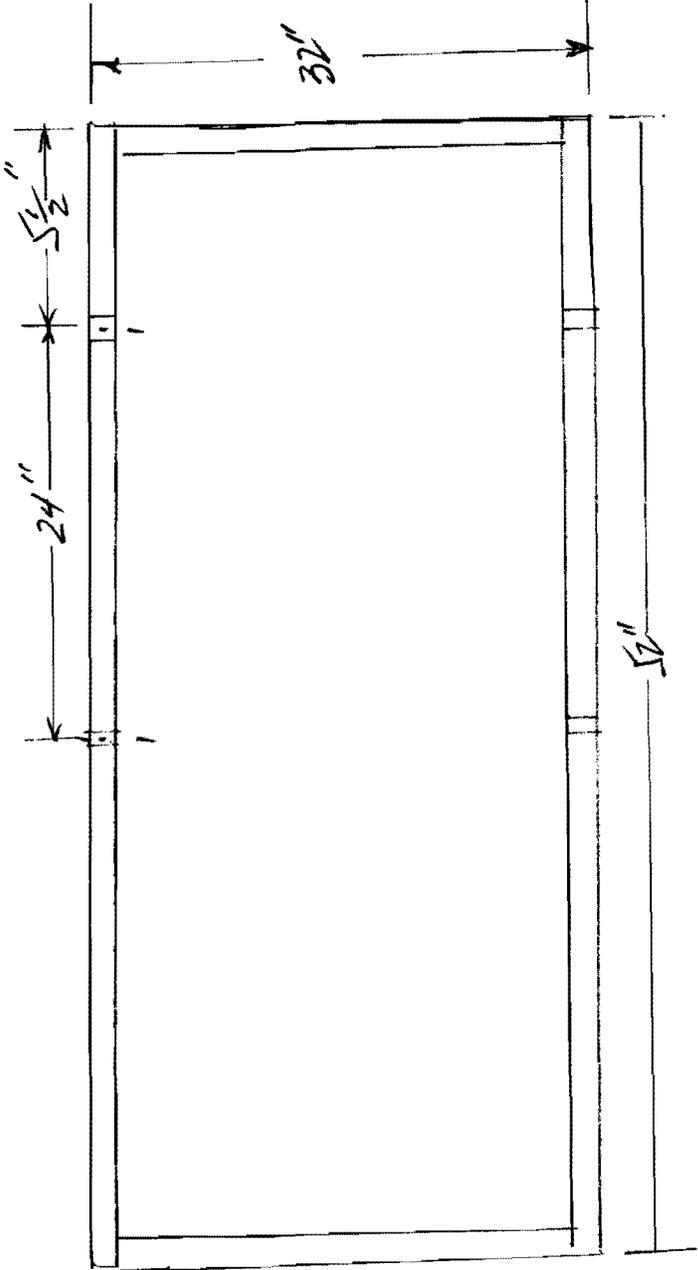
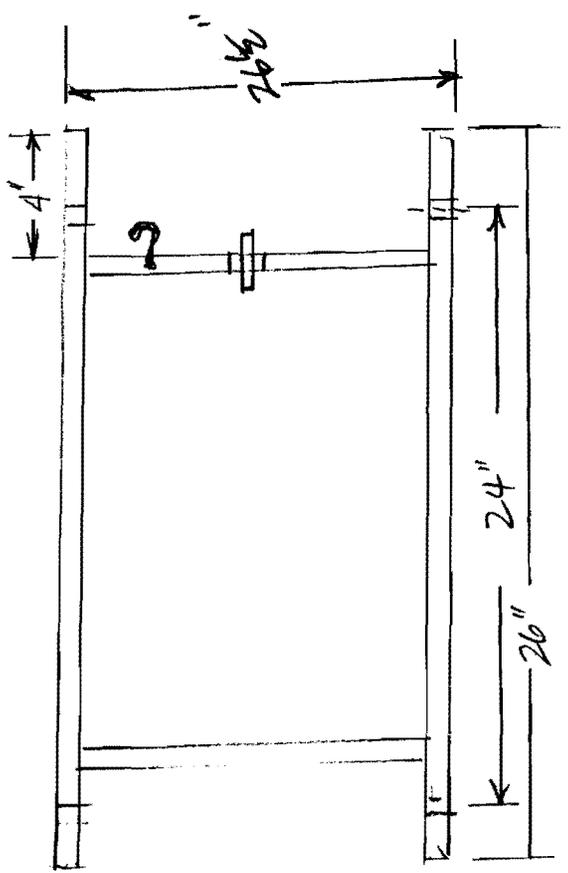


WINDOW BRACKET

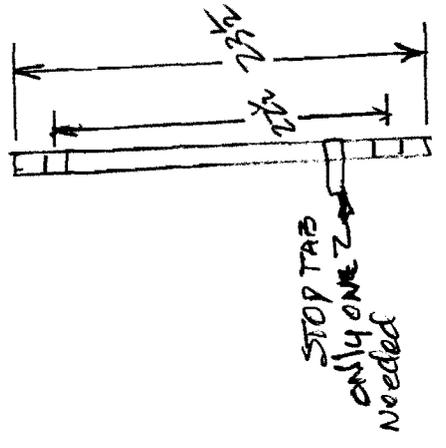


BASE

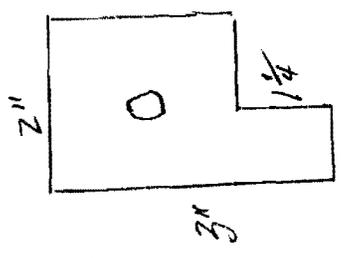
PLATFORM



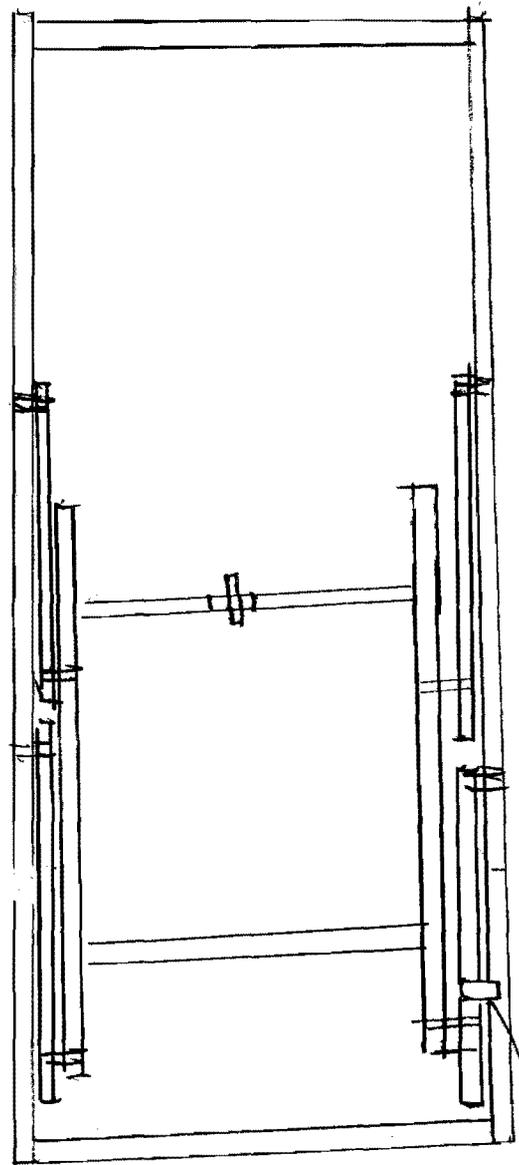
LEGS



4 Req'd



PULLEY BRACKET



LEG & PLATFORM LAYOUT

STOP TAB

EASY LIFT INSTRUCTIONS

Bill of materials:	QTY	USED FOR:
1.25 sq. tubing .095 wall	40'	frame
Flat strap .250 x 3"	4"	pulley bracket
Angle iron 3" .250 thick	8.5"	winch bracket
Safety chain	18"	
Safety hook	1	to fit chain
1/2 sae 3.50" bolts	8	leg studs
1/2 sae 3" long bolt	1	pulley
3/8 sae 1" bolts	2	winch mount
2" pulley/shiff	1	cable take up
1/2 sae nylock nuts	9	platform and pulley
3/8 sae nylock nuts	2	winch bracket
Superwinch EX1 model 1100	1	
1/2" id tubing	4"	optional for platform
1 1/2 3/8 angle iron	2@ 25"	upright bracing
1"w x 3"long 1/8" flat	1	platform stop
1/4" square or angle iron	2	upright stops

Some opening thoughts:

If you can buy in the 1 1/4 tubing in 20' lengths it will be cheaper. You can substitute .120 wall tubing for the two 52" pieces and avoid some of the bending that will take place over time. It's not a big issue and building the entire lift out of .120 wall will cost more and weigh a lot more. Even though it calls for 40' of tubing you will have to be smarter than I to be able to plan all your cuts not to have waste. Buy more than you need.

Be very accurate with the drilling of the holes. In order for the lift to go up and down smoothly, all the distances must be absolutely dead on. A drill press and fixture really helps.

Finally, don't try to go cheap on the winch. You must use one that has no freewheeling and must be electrically let out. If you try to cut costs on the winch, you will regret it and find it won't be up to the job.

Most of the hardware can be found at a home center but I would recommend buying the pulley at a wire rope or cable outlet. It will be made for heavy duty lifting and most likely bushed to deal with the weight.

SAFETY ISSUES:

Lifting an 850 pound car 24" off the ground involves risk.

1. The ground must be level as possible.
2. Never stand directly above the cable when lifting. If it breaks you do not want to be in the way if it whips.
3. Try to avoid getting the cable bunched up. It will wear out and break. Watch for fraying of the cable.
4. Always use the safety chain while the car is off the ground.

BUILDING STEPS:

1. Cut all the pieces at one time to simplify.
2. Drill all the holes very accurately. If you have a drill press, use a fixture it will help the process a lot.

3. Assemble the base assuring the entire piece is square and tack in place.
4. Cut the heads off 8 - ½ bolts.
5. Each of the 4 legs will contain 2 bolts. Each one pointing in the opposite direction. One goes out to the base and one goes inward towards the platform. Weld the bolts into the legs. Make sure they're square to the legs. Radius the ends of the legs, especially the ends near the ground to avoid scrubbing.
6. The platform can be welded together. Skip weld to reduce warping.
7. Weld the pulley bracket in the center of the cross member nearest to the winch.
8. Place the 4 legs in the base and while upright, install the platform on the inside of the legs. You will be able to stretch things enough to get the platform on the studs you've welded in.
9. I use pilot tubes, sections of ½ " id tubing, inside the platform to increase rigidity and wear resistance. You can skip this step if you want.
10. Make sure the platform goes up and down easily then weld the pilot tubes in place if used.
11. Weld the entire base, skipping from side to side and end to end to avoid warping.
12. Weld a tab to one leg according to the print. This will prevent the platform to fall through the base when lifted off the ground for loading.

13. Cut one end of each leg of the upright at 70 degrees. Assemble and weld the upright with the angled ends down. Make sure the angles are pointing the same way. Skip weld to avoid warping.
14. Weld the winch bracket, chain and hoop for cable onto the upright.
15. If you want a knock down lift, you can weld receivers on the base so the upright will slide over and stand in place. Two sections of square tubing, sized to slide into the 1 ¼ tubing will act as receivers. If you decide to use the knock down version, be very careful to make sure the moveable braces are in place before raising the car. Otherwise, it will bend itself up. If you decide not to use the knockdown, I don't, weld the upright to the base.
16. Weld the two angle iron braces from the base to the upright. If you are building a knock down version, do not weld the braces, make them bolt on. Drill a bolt hole on one end of the angle iron and one in the upright to act as a pivot. Then weld a strong stop on the base to retain the foot of the brace.
17. Raise the entire frame until 90 degrees straight up and weld stops in the upright to prevent the platform from going over center.