

Important Note

1. This equipment can not be installed, operated or repaired without reading instructions.

2. Electricity must be hooked up by certified electrician.

3.Do not use this equipment beyond its rated capacity.

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1-Main features of the equipment

1.1-Product description

Model: SAE-S66M is a hydraulic lift, the whole product can move, with electronic control box, easy to operate. It is suitable for 6600lbs or less inspection, repair and maintenance of various types of vehicles.

1.2-Features of the product

The hydraulic lift adopts the support arm. Adjustment of the length and width of the outrigger. The lift has the characteristics of compact structure, small space, easy to move, no need to install the base, etc.

1.3-Safety Marking of products

| | Do not operate the lift unless you read and understand the operation manual. | | |
|---|---|--|--|
| 2. | Don't stand under the vehicle or on the lift. | | |
| 3. | No stacking of debris , Always keep lift area clear , when lowering or raising vehicle. | | |
| 4 | Do not lift one side of the vehicle. | | |
| 5. | Only Authorized person can be in the lift area. | | |
| 6. | Do not place feet under any part of the lift while lowering. | | |
| 7. CALLER AND A CONTRACT OF A | 1.Rise 2.Stop. | | |
| 8 | Always use safety stands when moving / installing heavy components. | | |
| Digest of sa | Digest of safety operating lift | | |
| * The operation of the lift is permitted by authorized persons only. | | | |

- * It is necessary to refer to the complete operation instructions, especially for trouble shooting.
- * Movable and mobile lifts shall be prevented from moving unintentionally.
- * The field of motion of the load and of the load carrying devices shall be free of obstructions.
- * It shall draw attention to the safe method of carrying the load and to the rule that, after raising a short distance, the vehicle shall be checked to ensure that it is correctly and safely positioned.
- * It shall draw attention to the rule that the load carrying device shall be observed by the operator throughout the motion of the lift.
- * It is forbidden for people to stand in the field of motion of the load and the load carrying device during the movement.
- * It is forbidden to climb onto the load or load carrying device when they are raised.

| Model | SAE-S66M |
|-----------------------------|--|
| Lifting capacity | 6600lbs(3000Kg) |
| Max lifting height | 74 13/16"(1900mm) |
| Min height | 3 9/16"(90mm) |
| Lifting time | About 50 Sec. |
| Lowering time | About 40 Sec. |
| Column Thickness of Steel | 5.5mm |
| Carriage Thickness of Steel | 12mm/20mm |
| Arms Thickness of Steel | 6mm |
| Arm range | 15 3/16"-25 9/16"(386-650mm) 21 1/8"-32"(536.5-812mm) |
| Motor voltage | 110V/220V |
| Motor Power | 3 HP |
| Rated Frequency | 60Hz |
| Breaker | 30A |
| Hydraulic oil | 3-5 Gallons AW32/AW46 |
| Shipping Size | 114"×59"×34" |
| Shipping Weight | 2119lbs |

3-Spare parts in the accessories box.

| Serial number | Name | Photo | Parameter | Quantity |
|------------------|---|-------|-----------------------|----------|
| 1 | Swing arm big support arm combination and block assembly connection screw | I | Hexagon Screw | 8 |
| 2 | Column and base connecting screw | | Hexagon Screw | 10 |
| 3 | Power unit fixing screws | | Hexagon Screw M8×25 | 4 |
| 4 | Anti-collision tape | 0 | | 1 |
| 5 | Heightening sleeve bracket fixing screw | | Hexagon socket screws | 2 |
| 6 | Hose | | | 1 |
| 7 | Plastic cable tie | | | 30 |
| 8 | Increased set | | Φ55×70L | 4 |
| 9 | Round gasket | Ô | | 2 |
| 10 | User's manual | | | 1 |

4-Shape and size of equipment

4.1-Product Structure Group



| Serial number | Name |
|------------------|------------------------------------|
| 1 | Column assembly |
| 2 | Base assembly |
| 3 | Swing arm big support arm assembly |
| 4 | Right swing arm assembly |
| 5 | Left swing arm assembly |
| 6 | Left front arm assembly |
| 7 | Right front arm assembly |
| 8 | Hydraulic power unit |
| 9 | Press handle trolley assembly |
| 10 | Anti-collision tape |
| 11 | Screw base |
| 12 | Pillar curtain |

4.2-Shape and size of equipment



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5-Installation of equipment

5.1-Installation of columns and bases



5.2-Installation of carriage and lifting platform

1.Base

2. Column

3. Flat pad Φ20

- 4. Spring mat Φ20
- 5. Hexagon bolt M20×50



- 1. Carriage
- 2. Lifting platform
- 3. Hexagon bolt M18×50
- 4. Spring mat Φ18
- 5. Flat pad Φ18
- 6. Rubber
- 7. Hexagon bolt M8×30



5.5-Power unit installation



- 1. Hydraulic lifting assembly
- 2. Hydraulic lifting shaft
- 3. Axle clip spring Φ25



****Important Information****

Pressure Valve: Clockwise adjustment increases pressure to make the power unit to have more power, counterclockwise adjustment decreases pressure to make the power unit to have less power. Hydraulic Oil flow valve: Clockwise adjustment to speed up, counterclockwise adjustment to slow down.

6-Operation and commission of equipment

6.1-Instructions for operating

6.1.1 Check all joints and tubing connections. The machine can only be used if there is no oil leak.

6.1.2 If the safety device of the lift fails, it must not be put into use.

6.1.3 If the center of gravity of the repaired vehicle is not located in the center of lift range, Anybody can not operate the lift, otherwise the manufacturer and dealers do not bear any consequences.

6.1.4 The operator and other staff must stand in a safe area during the lift's ascent and descent.

6.1.5 When the arm is raised to the required height, the power must be turned off to avoid misoperation by nonoperators.

6.1.6 Make sure the safety lock is in bite position before working under the car. All personnel shall not be under the vehicle while the lift is going up and down.

6.2-Operation Flow

To avoid damage to personal property, only trained personnel can operate the lift. Before lifting the vehicle, read the operation instruction and teat operation of the lift to be familiar with the control of the lift. Always use four lifting pallets to lift the vehicle. Do not lift only one end or end of the vehicle.

6.2.1-Lift Up

1. The vehicle sops, moves the lifter, moves the lifter under the vehicle; or the lifter does not move, the moving vehicle passes the lifter and stops to the proper position.

2. Swing the lifting arm to the car's center of gravity is at the center of the four lifting arms.

3. To turn on the power switch, gently press the up button on the power unit until the lifting arm pad touches the support point of the car.

4. Keep going up, get the car off the ground a little bit, and then check the car's position again.

5. Rise to the required height, check whether the car is safe, and then press the lock button on the electronic control box so that the safety lock in place, then workers can work under the car.

6.2.2-Lifter down

1. Make sure there are no people or other obstacles under the car before you descend.

2. Open the power switch, press the drop button on the power unit the machine will automatically rise about 5cm, out of the safety, electromagnet work, lift down.

3. After the lifting arm is completely lowered, the mobile lifting arm leaves the car or the retractable arm drives the car away.

7-Maintenance and inspection of equipment

| No. | ltem | Method | Period |
|-----|------------------------------------|---|-------------------|
| 1 | Arm Safety lock Gear Assembly | Manually check arm safety lock teeth for occlusion and complete lock. | Everyday |
| 2 | Spiral base | Check the lift arm, clean and replace the rubber base. | Everyday |
| 3 | Oil Cylinder and Oil pipe joint | Before using the lift, check for oil leakage | Everyday |
| 4 | Safety lock combina- tion | Check that the safety lock can be unlocked and unlocked synchronous- ly. | Everyday |
| 5 | Limit Switch | Press the up button, when the gear limit is in effect, whether the lifting stops the up movement. | Everyday |
| 6 | Power unit | Inspect unloading valve for leakage. If leakage occurs, clean or replace the unloading valve. | Everyday |
| 7 | Slide track | Lubricate the chain with N0.1 lithium based grease. No obstruction on the track. | Every three month |
| 8 | Chain and pin | Lubricate the chain with N0.1 lithium based grease. | Every three month |
| 9 | Wholeness | The amount of load or no-load lifter several back and forth, lifter should run stable sound. | Every three month |
| 10 | Hydraulic oil | Replace Hydraulic Oil 6 months after first use and annually thereafter. Check the cleanliness of the hydraulic oil, if the hydraulic oil blackened | Every year |



8-Common trouble shooting

| Troubles | Reason | Solution |
|---|---|---|
| Find out unusual sound | Any friction marks on the inside of the cylin- der | Grease the inside of the column. |
| | If there's an obstruction in the cylinder | Clear the obstacle. |
| | Bad wire contact | Check and connect the lines. |
| The Motor doesn't turn, it doesn't go up | Motor broken and burnt out | Replace Motor. |
| | The limit switch is damaged | Replace limit switch. |
| | Motor reversal | Corrective wiring. |
| | Loose relief valve or obstruction | Adjust or clean the relief valve. |
| The motor turns but does not | Gear pump damage | Replacement gear pump. |
| | The suction pipe came loose and fell off | Tighten the suction pipe. |
| | The filter screen of the oil suction pipe is blocked | Clean the filter screen. |
| | Check the tubing for leakage | Replace tubing. |
| | Poor cylinder seal | Replace cylinder seal. |
| Take it down slowly as it rises | Poor sealing of check valve | Clean up or replace. |
| | Poor Relief Valve | Clean up or replace. |
| | Poor electromagnetic relief valve | Clean up or replace. |
| | Plugging of oil filter | Clean up or replace. |
| | Oil pressure mixed with air | Replenishing hydraulic oil. |
| Slow ascent | The overflow valve is not adjusted properly | Readjusting |
| | Heating of hydraulic oil (above45°) | Change hydraulic oil |
| | Cylinder seal wear out | Replaceseals |
| | The drop throttle is jammed with an obstruc- tion | Clean up or replace |
| Slow doccont | Hydraulic oil is dirty | Change hydraulic oil |
| | There is an obstruction in the explosion-proof throttle | Replacement of explosion-proof throttle valve |
| | There's a blockage in the oil pipe | Clean up or replace |

9. Structures and parts list



9.1 Slide carriage exploded view



| No. | Name | Specifications | Qty. |
|-----|------------------------------|---------------------|------|
| 1 | Weld carriage assemble | | 1 |
| 2 | Inner hex column bolt | GB/T70.1-2000 M6x16 | 1 |
| 3 | Column roller bearing | GB/T283-94 NUP2308M | 2 |
| 4 | Slide wheel | | 2 |
| 5 | A - type shaft keep off ring | GB/T894.1-1986 40 | 2 |
| 6 | A - type bore keep off ring | GB893.1-8390 | 2 |

9.2 Loading supporting arm exploded view



| No. | Name | Specifications | Qty. |
|-----|--------------------------------|---------------------|------|
| 1 | Three group screw plate | φ50 | 4 |
| 2 | Height set | | 4 |
| 3 | A-type shaft keep off ring | GB/T894.1-1986 50 | 4 |
| 4 | Cross tray bolt | GB/T 818-2000 M6X12 | 4 |
| 5 | Main supporting beam | | 1 |
| 6 | Inner hex column bolt | GB/T70.1-2000 M6x12 | 2 |
| 7 | Cross tray bolt | GB/T 818-2000 M6X12 | 2 |
| 8 | Rear weld assemble | | 2 |
| 9 | Rear extendable arm assembly | | 2 |
| 10 | A-type spring keep off ring | GB/T894.1-198636 | 2 |
| 11 | Arm fix shaft | | 2 |
| 12 | Arm assemble | | 2 |
| 13 | Front extendable arm assembly | | 2 |
| 14 | Slide gear tooth | | 2 |
| 15 | Inner hex column bolt | GB/T70.1-2000 M6x16 | 2 |
| 16 | Spring | | 1 |
| 17 | Handle ball | M10 | 2 |
| 18 | Hex bolt | GB/T5781-2000 M8x35 | 2 |
| 19 | Flat washer | GB/T97.1-1985 8 | 2 |
| 20 | Lock release fork assemble | | 2 |
| 21 | Non metal embedded tighten nut | GB/T 6172.2-2000 | 2 |
| 22 | Supporting arm assembly | | 1 |



| No. | Name | Qty. |
|-----|------------------------|------|
| 1 | Pipe connecting | 1 |
| 2 | Cylinder | 1 |
| 3 | Cylinder cover | 1 |
| 4 | Cylinder guide | 1 |
| 5 | Dust proof ring | 1 |
| 6 | Rod | 1 |
| 7 | Y- type seal ring | 1 |
| 8 | Guide ring | 1 |
| 9 | O - type ring | 1 |
| 10 | Rod | 1 |
| 11 | Trolley base | 1 |
| 12 | Chain wheel | 1 |
| 13 | Spring washer | 1 |
| 14 | Cross tray bolt | 1 |
| 15 | Welded wheel shaft | 1 |
| 16 | Non oil bearing | 1 |
| 17 | Plate chain | 1 |
| 18 | Placket pin | 4 |
| 19 | Chain connecting shaft | 1 |
| 20 | Placket pin | 1 |
| 21 | I - type hex nut | 2 |
| 22 | Drive system | 1 |

| nbly | | 5 | | |
|------|-------------|--|-------------|--|
| | No. | Name | Qty. | |
| | 1 | Base welding | 1 | |
| | | | | |
| | 2 | Base roller shaft | 2 | |
| | 2 | Base roller shaft Base roller | 2 | |
| | 2 3 4 | Base roller shaft Base roller Oil-free bearing | 2 2 4 | |

9.5-Casting front arm assembly



| No. | Name | Qty. |
|-----|--------------------------------------|------|
| 1 | Cast front support arm | 1 |
| 2 | Mobile arm welding | 1 |
| 3 | Oil-free bearing | 1 |
| 4 | Casting front arm crescent teeth | 1 |
| 5 | Socket head cap screws M10×20 | 3 |
| 6 | Flat head hexagon socket screw M8×20 | 1 |
| 7 | Rubber pad | 1 |
| 8 | Pallet welding | 1 |
| 9 | Tray adjustment sleeve 1 | 1 |
| 10 | Socket head cap screws | 1 |
| 11 | Tray adjustment sleeve 2 | 1 |
| 12 | Socket head cap screws M10×12 | 1 |

9.6-Swing arm left support arm assembly



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9.7-Swing arm right arm assembly



| No. | Name | | | |
|-----|---|---|--|--|
| 1 | Welding of left arm of swing arm | 1 | | |
| 2 | Swing arm welding | 1 | | |
| 3 | Swing arm moon teeth | | | |
| 4 | Flat pad Φ10 | 3 | | |
| 5 | Spring cushion $\Phi 10$ | 3 | | |
| 6 | Hex bolts M10×35 | 3 | | |
| 7 | Socket head cap screws M10×12 | 1 | | |
| 8 | Flat head hexagon socket screw M8×20 | 1 | | |
| 9 | Rubber pad | 1 | | |
| 10 | Pallet welding | 1 | | |
| 11 | Tray adjustment sleeve 1 | 1 | | |
| 12 | Tray adjustment sleeve 2 | 1 | | |
| 13 | Socket head cap screws M8×18 | 1 | | |

Socket head cap screws M8×18

1

9.8-Block assembly



| No. | Name | Qty. | No. | Name | Qty. |
|-----|---|------|-----|--|------|
| 1 | Manual lock trolley welding | 1 | 15 | Welding of manual lock card wheel support plate | 1 |
| 2 | Shaft bowl | 2 | 16 | Manually unlock the tension spring | 2 |
| 3 | Bearing-NU308E | 2 | 17 | Manual lock wheel connecting rod welding | 1 |
| 4 | Nylon bushings on both sides of the trolley | 4 | 18 | Hex nuts M6 | 1 |
| 5 | Nylon sleeve | 4 | 19 | Manually unlock the card wheel support plate shaft | 1 |
| 6 | Nylon slider | 2 | 20 | Circlip Φ10 | 1 |
| 7 | Handball | 1 | 21 | Self-locking hexagon nuts M8 | 2 |
| 8 | Manual unlocking lever | 1 | 22 | Manual unlocking lever plus sleeve | 1 |
| 9 | Socket head cap screws M6 $	imes$ 20 | 3 | 23 | Manual lock connecting plate | 1 |
| 10 | Manual lock fork welding | 1 | 24 | Lock plate welding | 1 |
| 11 | Manually unlock the sliding sleeve | 2 | 25 | Lock plate septa | 1 |
| 12 | Circlip Φ20 | 2 | 26 | Hexagon nut M18 | 1 |
| 13 | Manually unlock the sliding sleeve | 1 | 27 | Manual lock plate cover | 1 |
| 14 | Flat pad Φ10 | 1 | 28 | Lock plate shaft | 1 |