

*Silo-Matic*

**1335X WINCH &  
1356X POWER WINCH  
ATTACHMENT**

**OPERATING INSTRUCTIONS & PARTS  
MANUAL**

Valesco Manufacturing, Inc.  
7857 N 1100 E  
Loogootee, IN 47553  
(812) 636-6002

## WINCH OPERATION

The silo unloader is raised and lowered by the winch. Winches are either manual requiring cranking; or are electric and operated by an electric motor. Crank the manual winch clockwise to raise the unloader.

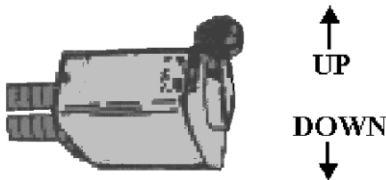
Approximately 5 cranks equal 1" of cable travel. To speed the unloader raising process, an electric drill adapter can be used in place of the crank. It is recommended that a 3/4" drill be used for raising.



**CAUTION: BE AWARE THAT WITH USING A HIGH SPEED DRILL, THE LARGER THE WRAP ON THE DRUM BECOMES THE GREATER THE LOAD ON THE WINCH BECOMES. THEREFORE, AS THE UNLOADER NEARS THE TOP, CHECK THE GEARCASE AND IF IT BECOMES TOO HOT TO TOUCH (120 DEG. F) STOP OPERATION UNTIL IT COOLS DOWN.**

**IMPORTANT:** The first layer of cable must be wound making sure all cable layers are wrapped evenly and tight.

**IMPORTANT:** Check oil level at oil level plug before raising. Otherwise check (4) times annually.



## MOTOR REVERSING SWITCH

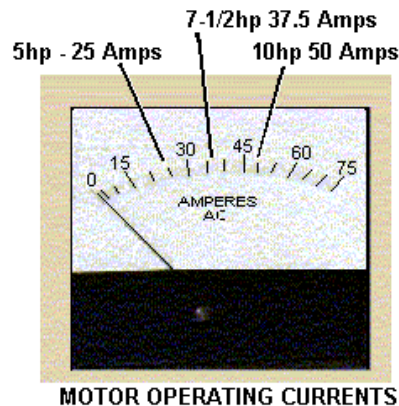
An optional electric winch enables remote controlled lowering and raising of the unloader at low speed. To raise the unloader, push and hold the control switch lever up. To lower, push and hold the switch lever down. The switch lever is spring loaded and turns off when released by the operator.

## OPERATING THE UNLOADER

Position the Torque Arm on the lower silo door sill opening. Put the gooseneck in position. When starting in any silo for the first time, the surface should be reasonably level. Allow the unloader to level off high spots before operating at full load.

Lower the unloader slowly until the silage flow is constant and the Ammeter "reading" becomes steady for about 5 minutes (one complete unloader Revolution.)

Turn the unloader on and let the winch down one or two turns LESS than the number of turns it was raised at the end of the previous unloading. Usually the silage surface will "raise" between feedings.



If using an electric winch, it is best to use a "count" or time system to regulate the winch.

The ammeter should be referred to when setting the unloader cutting depth for proper performance of the unloader and to maintain a uniform unloading rate.

The ammeter reading will normally fluctuate during operation and the average reading should be "read".

Slowly lower the unloader until the "reading" corresponds to the figure. For more exact amperage check the name plate on the specific motor installed.

When the amperage drops and silage flow lessens, lower the unloader. Experience will tell you about how often and how much lowering is required. Lowering rates should remain constant from one feeding to the next unless freezing weather or change in stored material occurs.



**WARNING: SHIELDS AND COVERS ARE FOR YOUR PROTECTION. BE SURE THAT THEY ARE IN PLACE BEFORE OPERATING. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.**

If the unloader stops discharging, shut it off immediately. Raise it and determine the cause. See the Trouble Shooting Section.

After unloading, raise the machine about 15 turns of the winch, or sufficiently high to lift it off the silage surface.

Allow the machine to run a couple seconds to completely clear itself of silage and then turn the switch off. When the silo is empty, clear all silage accumulation off the machine and raise it off the silo floor.

# INSTALLATION INSTRUCTIONS

## UNLOADER SUSPENSION

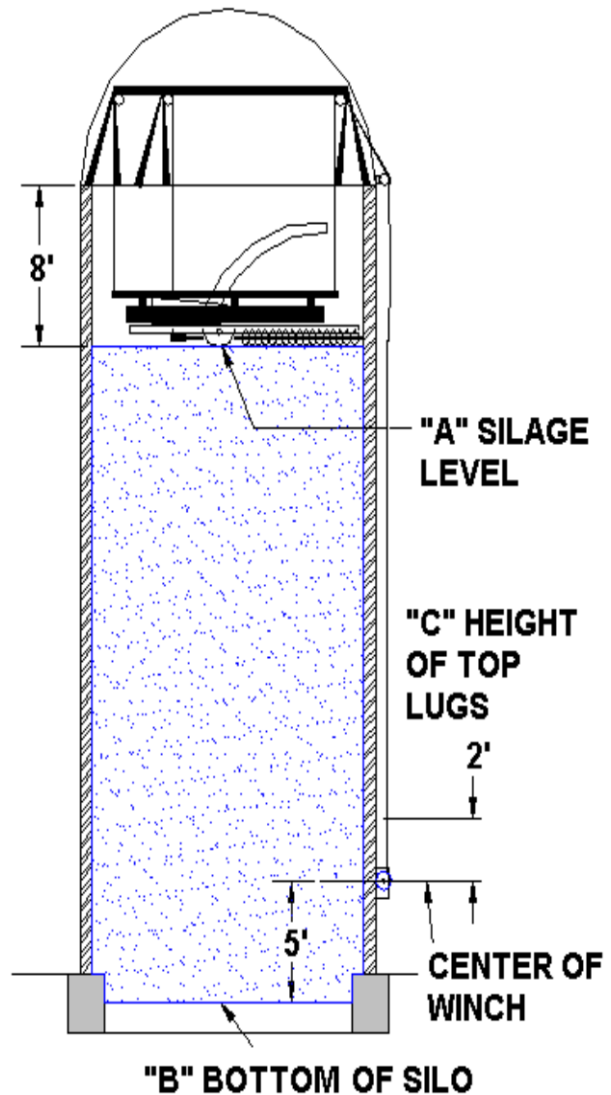
### SPECIAL INSTRUCTION FOR CABLE INSTALLATION IN A PARTIALLY EMPTY SILO

When installing unloader in a silo that is not completely empty the following method should be used to install the suspension cable. Also refer to section titled CONNECT SUSPENSION CABLE AND LEVEL.

1. Measure the distance from the top of the silo staves to the silage level. Dimension "A."
2. Measure the distance from the bottom of the silo (include pit if one exists) to the center of the winch spool. Dimension "B."
3. Subtract "B" from "A" and subtract an additional (1) ft. This equals the distance "C" which is from the top lug on the cable assembly to the center of the winch. If "C" is a negative value then it indicates that this amount of cable lug length should be wrapped onto the winch spool.

EXAMPLE: "A" - "B" - 1 = "C"

$$8\text{ft} - 5\text{ft} - 1\text{ft} = 2\text{ft}$$



## WINCH INSTALLATION

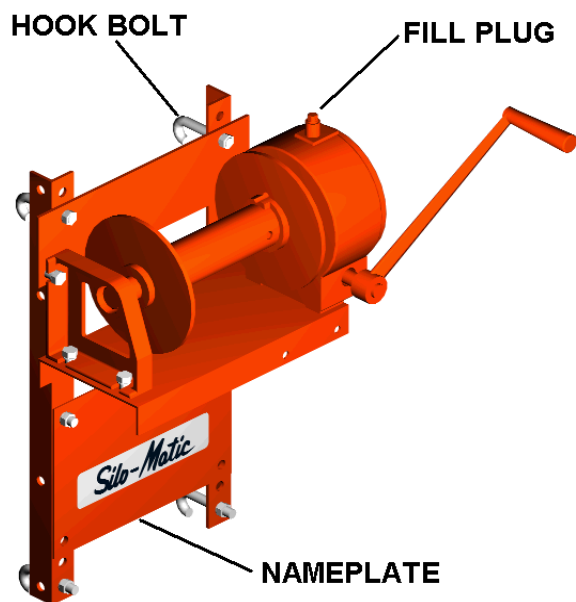
1. Attach winch angles to winch assembly with two 1/2" x 1" HHCS, nuts and lockwashers at the bottom and with two hook bolts at the top of vertical mounting plates on rear of winch.
2. Attach name plate to winch angles with four 1/2" x 1" HHCS, nuts and lockwashers.
3. If necessary, loosen two silo hoops enough to insert four hook bolts.
4. Attach winch assembly to silo hoops with hook bolts in the holes matching the silo hoop spacing. Hooks can be turned up or down as required.

**NOTE: Make sure center of winch is located directly under pulley on tripod leg. Tighten all bolts securely.**

5. A socket head capscrew located between the gearbox and right hand winch drum flange is provided to secure the end of the suspension cable. Loosen setscrew and thread cable end through hole in winch flange, then tighten setscrew to clamp cable end securely.

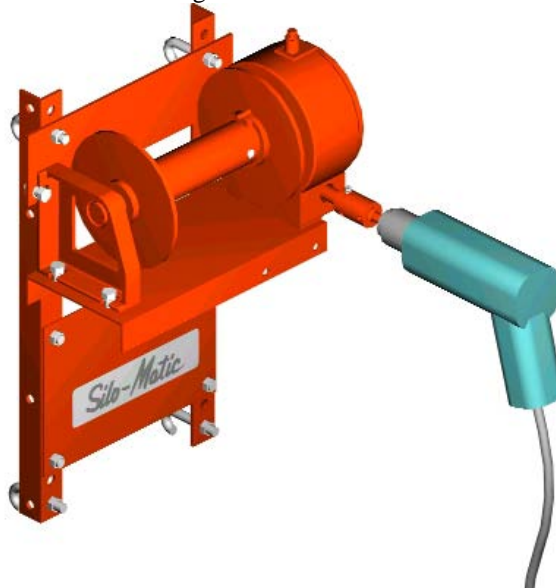
**CAUTION: THE FIRST LAYER OF CABLE MUST BE WOUND MAKING SURE ALL CABLE LAYERS ARE WRAPPED EVENLY AND TIGHTLY.**

6. Check oil level in winch gear housing at oil level plug. If necessary add **No. 90 all-purpose gear lube oil** until oil flows from oil level hole. Replace plugs making sure vent in filler plug is open.



### ELECTRIC DRILL ADAPTER (OPTIONAL)

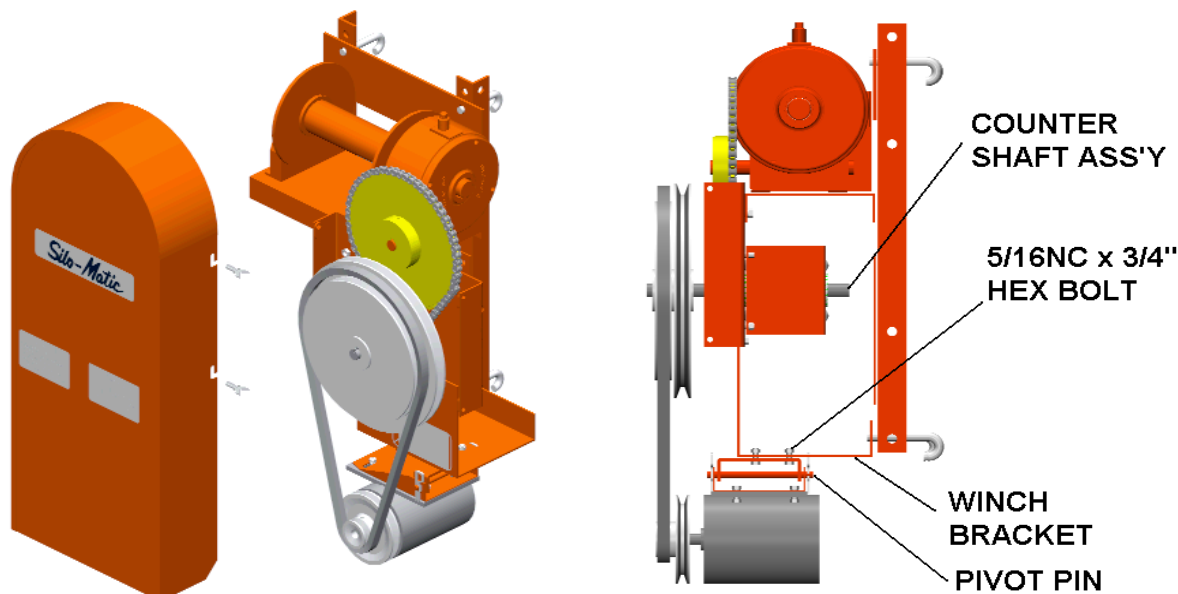
To speed the unloader raising process, an electric drill adapter can be used in place of the handle used for manual operation. It is recommended that a 3/4" drill be used to raise larger unloaders.



## TWO SPEED POWER ATTACHMENT (OPTIONAL)

The following figure shows the optional 2-speed power attachment completely assembled on the winch.

- 1.) To install the unit, first bolt the mounting plate to the winch base with two 3/8" x 3/4" HHCS, Nuts & Lockwashers.
- 2.) Attach the counter shaft assembly to the mounting plate with four 5/16" x 3/4" Crg bolts, nuts & lockwashers. Make sure notch in the front flange of the countershaft assembly is facing down.
- 3.) Attach bracket to mounting plate with four 5/16" x 3/4" HHCS, Nuts & Lockwashers.



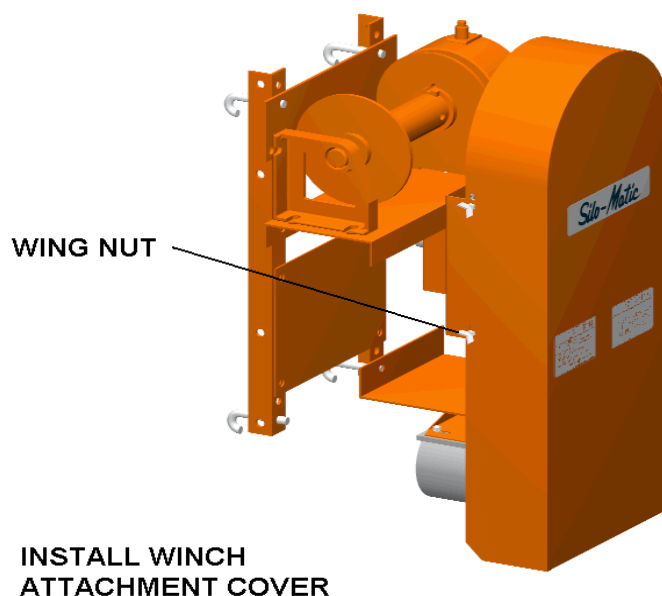
4.) Attach motor support bracket to bracket with two 5/16" x 3/4" HHCS, Nuts & Lockwashers.

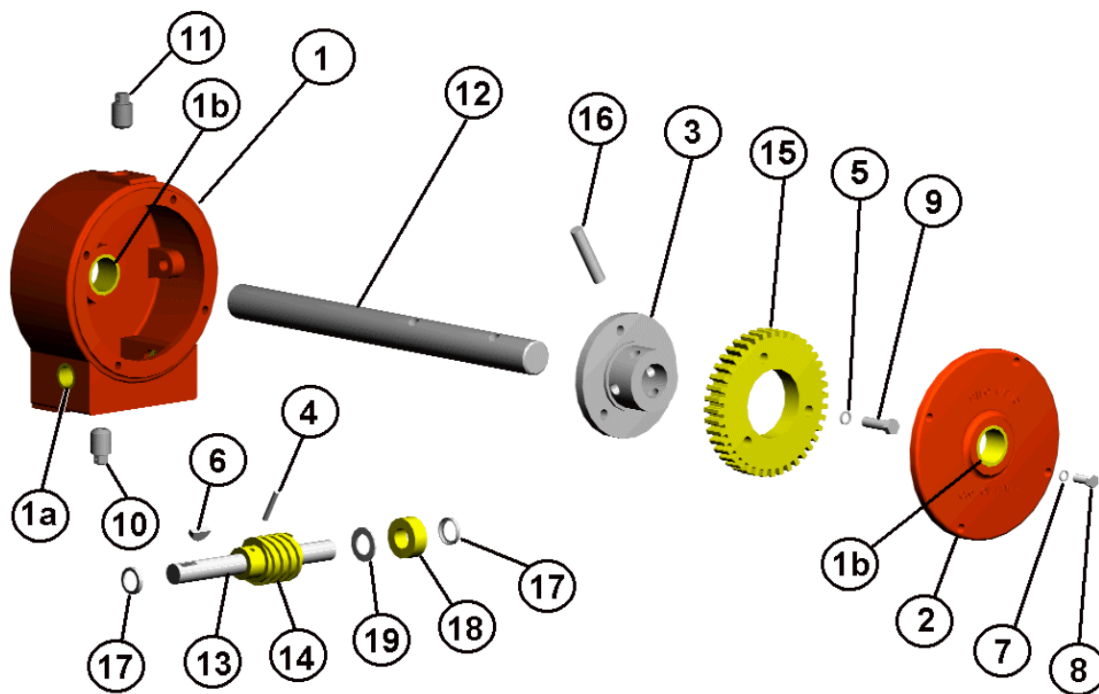
5.) Attach the motor mount plate to the motor with four 5/16" x 3/4" HHCS, flat washers, lockwashers & Nuts. Tighten securely.

6.) Assemble the motor and mount plate assembly onto the motor support bracket with pin and (2) 1/8" x 1" cotter pins.

7.) Place the large diameter sprocket on the winch stub shaft with the hub in. Position the sprocket so that the face of the sprocket is flush with the end of the shaft. Tighten setscrew. Position the countershaft sheaves and motor sheaves as shown on figure. Install V-belt (outer sheaves for feeding, inner sheaves for raising).

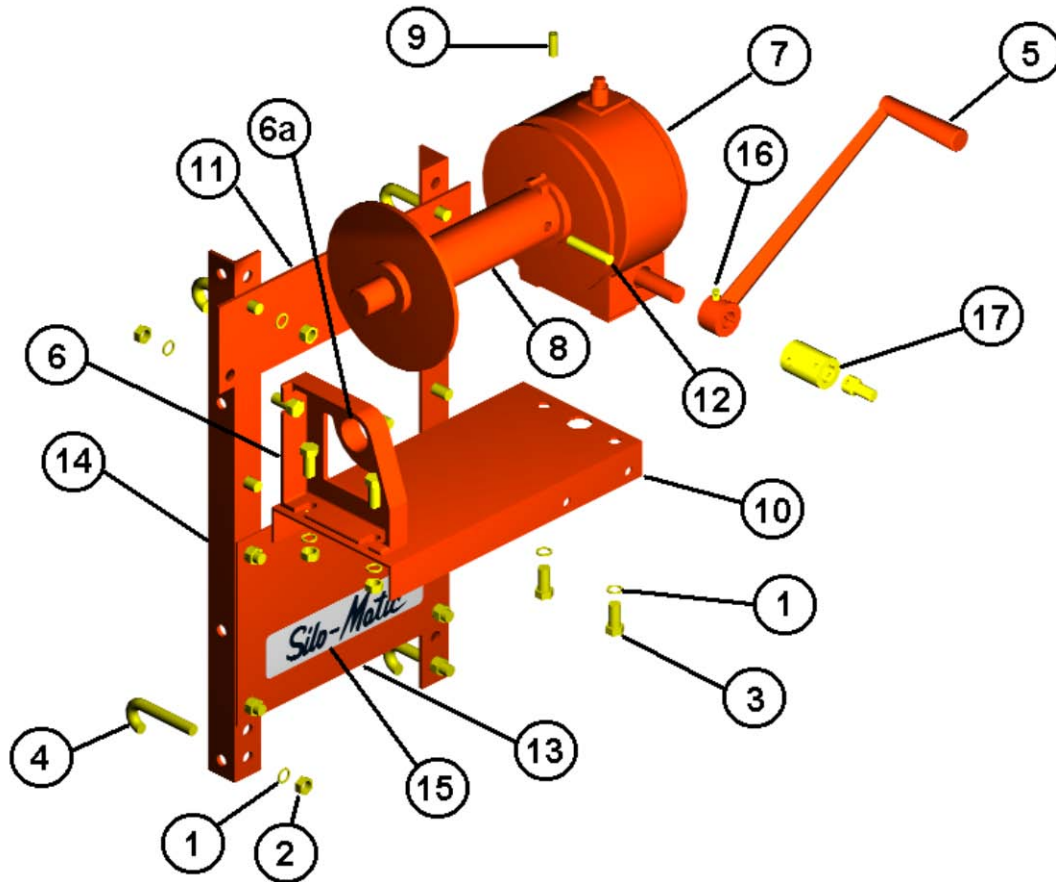
8.) Fasten shield to winch assembly with wing bolts as shown on the figure at right.





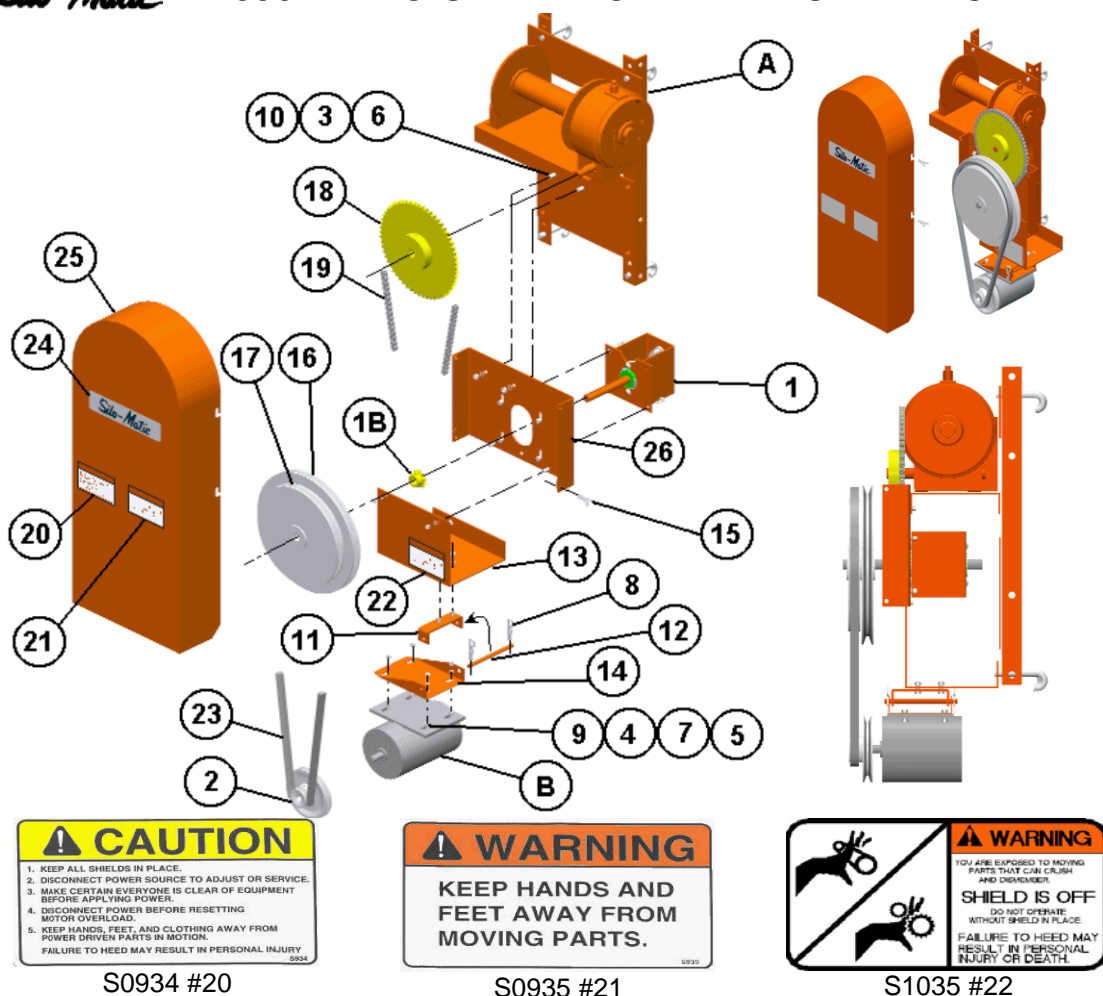
PC#	PART#	DESCRIPTION	QTY.
1	A0165	Gear Housing & Bushing	1
1A	S0225	Sleeve, .752 X 1.0025 X .750	2
1B	S0034	Bushing, 1.252 X 1.502 X 1"	2
2	A0166	Winch Housing Cover & Bushing	1
3	C0053	Worm Gear Hub-Oil Bath Winch	1
4	G273336	Spring Pin, 3/16" X 1-1/4"	1
5	G103321	Washer, Lock 3/8" ZP	3
6	G106751	Woodruff Key, #9 (3/16x3/4)	1
7	G120214	Washer, Lock 5/16" ZP	4
8	G180077	HHCS 5/16nc X 3/4 G5 ZP	4
9	G180124	HHCS 3/8nc X 1 1/4" G5 ZP	3
10	G444588	Plug, Pipe, Square 1/2" NPT	1
11	M0320	Vented Pipe Plug, 1/2"	1
12	M0394	Spool Shaft-Oil Bath Winch	1
13	M0397	Worm Shaft-Oil Bath Winch	1
14	S0076	Worm, RH, Single Thread	1
15	S0077	Worm Gear, RH Single Thread Winch	1
16	S0214	Spring Pin, 7/16 X 2 1/	1
17	S0226	Seal, 3/4" Grease-Input	2
18	S0603	Bearing, Thrust 3/4"	1
19	S0059	Machinery Bushing	AR

# Silo-Matic 1335X OIL BATH WINCH ASSEMBLY



PC#	PART#	DESCRIPTION	QTY
1	G103323	Washer, Lock 1/2" ZP	6
2	G120378	Nut, 1/2nc Hex ZP	10
3	G180173	HHCS 1/2nc X 1" G5 ZP	6
4	M0081	Bolt, "J" (Winch Mounting)	4
5	A0051	Crank	1
6	A0155	Winch End Bearing Assembly	1
6A	S0034	Bushing, 1-1/4 X 1-1/2 X 1"	1
7	A0156	Winch Gear Box-Oil Bath	1
8	C0051	Winch Spool-Oil Bath Winch	1
9	G102597	Setscrew, 3/8nc X 1" Socket	1
10	M0387	Main Support Channel-Oil Winch	1
11	M0388	Back Plate-Oil Bath Winch	1
12	S0214	Spring Pin, 7/16" X 2 1/4	1
13	M0324	Winch Plate, Tie	1
14	M0386	Vertical Angle-Oil Bath Winch	2
15	S1195	Decal, Silo-Matic (3.25 X 11.5)	1
16	G102581	Setscrew, 5/16nc X 3/8" Socket	1
17	A0167	Electric Drill Adapter	1

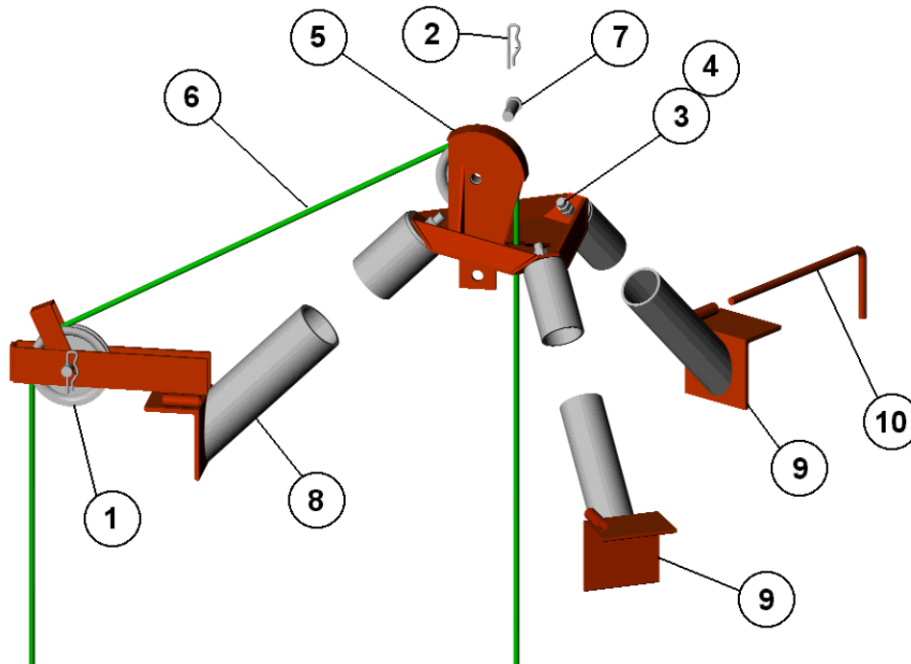




PC	PART#	DESCRIPTION	Qt	PC	PART#	DESCRIPTION	Qt
1	A0160	Jackshaft Assembly	1	15	S0108	Thumb Screw, 1/4nc X 3/4"	4
1B	S0219	40b10 Sprocket, 3/4" Bore	1	16	S0215	Sheave, 12" OD 3/4" Bore	1
2	C0054	Sheave, 2 Groove	1	17	S0216	Sheave, 10" OD 3/4" Bore	1
3	G103321	Washer, Lock 3/8" ZP	2	18	S0222	40B60 Sprocket, Bore	1
4	G120214	Washer, 5/16" Lock	12	19	S0223	#40 Roller Chain	1
5	G120376	Nut, 5/16nc Hex	12	20	S0934	Decal:"Caution Keep"	1
6	G120377	Nut, 3/8nc Hex ZP	2	21	S0935	Decal, Keep Hands ...	1
7	G120393	Washer, 5/16" Flat	8	22	S1035	Decal:Shield Is Off	1
8	G137185	Pin, 1/8" X 1" Cotter	2	23	S1064	Belt	1
9	G180077	Bolt, 5/16nc X 3/4" Hex	8	24	S1195	Decal, Silo-Matic	1
10	G180120	HHCS 3/8nc X 3/4" G5 ZP	2	25	W0237	Drive Shield W/Decals	1
11	M1979	Motor Support Bracket	1	26	W0238	Mounting Plate	1
12	M1980	Motor Bracket Pin	1	A	1356X	Winch Gearbox (Ref.)	
13	M1981	Bracket, 2 Speed Drive	1	B		Electric Motor (Ref.)	
14	M1982	Motor Mount Plate	1				



## *Silo-Matic* TRIPOD & CABLE



PC#	PART #	DESCRIPTION	QTY.
1	A0168	Cable Pulley	2
2	G103397	Cotter Pin, 5/32" X 1-1/4"	2
3	G120238	1/2nc Hex Jam Nut	3
4	G120378	1/2nc Hex Nut	3
5	W0977	Top Plate Weldment	1
6	RM30030	5/16" Aircraft Cable (Per Foot)	AR
7	S1267	Pin, 5/8 X 1-3/4"	2
8	W0979-XX	Tripod Leg, Cable (Xx = Size)	1
9	W0978-XX	Tripod Leg, Plain (Xx= Size)	2
10	M0096	Safety Hook	3

## OPTIONAL DOUBLE CABLE SUSPENSION

PC	PART #	DESCRIPTION	QT
1	G103321	3/8" Lock Washer	2
2	G103397	Cotter Pin, 5/32" X 1-1/4"	2
3	G103409	Cotter Pin, 3/16" X 1-1/2"	1
4	G120377	3/8NC Hex Nut	2
5	G180120	HHCS 3/8nc X 3/4" G5 ZP	2
6	S0031	Cable Clamp	AR
7	S0166	Cable Thimble, 1/4"	1
8	S0484	Pin 5/8"X 1-1/4"	2
9	S1061	Pin, Clevis, 5/8 X 2"	1
10	A0168	Cable Pulley	1
11	M0358	Side Plate, Dbl. Cable	1
12	M0370	Clevis Plate	2
13	W0681	Side Plate With Tab	1

