

OPERATIONS SECTION 1

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• INFORMATION CONTAINED IN THIS MANUAL •

OPERATIONS SECTION 1

The information contained in this manual provides important procedures to safely operate and maintain your engine driven screed. The steps that are illustrated in this manual must be followed. Otherwise, the life of the machine could be greatly shortened due to operator neglect. Remember that a machine that is well taken care of will provide many years of trouble free operation.

For your own protection and safety, always adhere to the safety warnings and notes that are pointed out in this manual. Disregarding these instructions could lead to personal injury or possibly even death.

Refer to the engine owners manual for warranty information and spare parts ordering. **Allen Engineering does not warranty the engine that came with your engine driven screed.**

• ORDERING PARTS •

This manual contains an illustrated parts list to help you in ordering replacement parts for your engine driven screed. Follow the instructions below carefully when ordering parts to insure that you get the exact parts that you are wanting.

- All orders for service parts must include a serial number. Shipment of your parts will be delayed if this information is not available when you call Allen Engineering Customer Service.
- Include the description and correct part number from Section 2, as well as the quantity needed.
- For prompt and accurate shipments, specify exact shipping instructions, including preferred routing and complete destination address.
- DO NOT return parts to Allen Engineering without receiving written authorization from Allen Engineering Corporation. All authorized returns must be shipped pre-paid.

When placing an order, contact your nearest Allen Engineering Distributor or call Customer Service at 800-643-0095 or 870-236-7751.

THIS MANUAL COVERS TRUSS SCREEDS STARTING WITH THE FOLLOWING SERIAL NUMBERS:
2-1/2' - ???, 5' - ???, 7-1/2' - ???



P.O. BOX 819
PARAGOULD, AR 72451-0819
USA

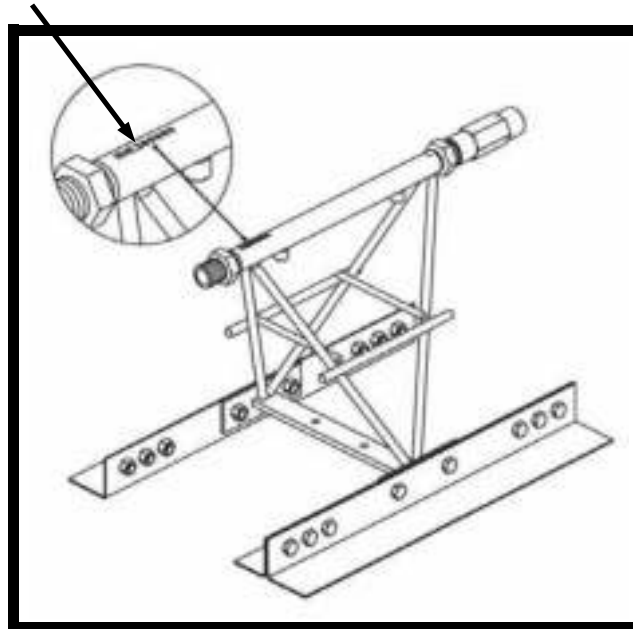
**WHEN ORDERING ADDITIONAL COPIES OF THIS MANUAL,
PLEASE CONTACT AEC CUSTOMER SERVICE AT
1-800-643-0095**

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CONTENTS SUBJECT TO CHANGE
WITHOUT PRIOR NOTICE.**

OPERATIONS SECTION 1

• SERIAL NUMBER LOCATION •

LOCATION OF SERIAL #



INFORMATION ON SERIAL NUMBER

SAMPLE # - HED82243

HED = MODEL

8 = LAST DIGIT OF PRESENT YEAR

2, 3, 5, 7 = SIZE OF TRUSS ASSEMBLY

2 = MONTH OF PRESENT YEAR

43 = SEQUENCE NUMBER OF SECTION BUILT IN
PRESENT MONTH

NOTE: EVERY SECTION THAT LEAVES ALLEN ENGINEERING HAS A SERIAL NUMBER STAMPED ON THE RIGHT HAND SIDE OF THE TRUSS TOP PIPE. WHEN ORDERING PARTS, YOU WILL BE ASKED FOR THIS SERIAL NUMBER. MAKE NOTE OF ALL YOUR SECTION SERIAL NUMBERS FOR FUTURE REFERENCE.

FILL OUT SERIAL #'S HERE FOR FUTURE REFERENCE

• DISTRIBUTOR INFORMATION •

OPERATIONS SECTION 1

PLACE DISTRIBUTOR INFORMATION HERE FOR FUTURE REFERENCE

DISTRIBUTOR NAME: _____ PHONE #: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

- - - - - S A L E S M A N :

ADDITIONAL COMMENTS: _____

• SAFETY NOTATIONS •

NOTE: Throughout this manual, there are **NOTES**, **CAUTIONS**, and **WARNINGS** which must be followed to reduce the possibility of improper service, damage to the equipment or personal injury.

- **NOTE** - Contains additional information important to a procedure.
- **CAUTION** - Provides information important to prevent errors which could damage the machine.

OPERATIONS SECTION 1

• OPERATING SAFETY •

Familiarity and proper training are required for the safe operation of this equipment. Equipment operated improperly or by untrained personnel can damage equipment and could be dangerous. Read the operating instructions contained in this manual to familiarize yourself with the location and proper use of all the controls.

DO NOT operate this machine until you have read the operating and safety instructions. Operate the machine in accordance with the manufacturer's instructions.

ALWAYS inspect your screed upon arrival for damage or tampering that can sometimes occur during shipping. If damage is found, file a claim with your carrier immediately!! Mark freight bill of lading as "damaged shipment".

NEVER allow untrained personnel to operate your engine driven screed. Individuals who operate this screed should have adequate training in operating procedures.

DO NOT attempt to fill hydraulic winch tanks while machine is running.

NEVER use over-the-counter hardware to replace manufacturers hardware. Contact your nearest Allen Engineering dealer or our Customer Service department.

HAZARD: When operating machines with gas engines in confined areas, the fumes must be ventilated. Improper ventilation could lead to serious health problems or even death.

ALWAYS be aware of *HOT* components on this machine, such as hydraulic components.

ALWAYS be aware of rotating drive shaft on the engine driven screed. Failure to keep away from the drive shaft could lead to severe injury.



• SERVICE SAFETY •

OPERATIONS SECTION 1

DO NOT attempt to clean or service screed while machine is running. The rotating shaft could cause severe injury.

DO NOT attempt to start a flooded engine with the spark plug removed on gasoline powered engines. Fuel trapped in the cylinder will squirt out of the spark plug opening.

DO NOT test for spark on gasoline engines if engine is flooded or the smell of gasoline is present. A stray spark could ignite the fumes.

DO NOT use gasoline, other fuels, or any flammable solvent to clean parts, especially in enclosed areas. Fumes from fuels and solvents can cause serious health problems if you are exposed to them over an extended period of time.

ALWAYS disconnect spark plug before servicing engine to prevent accidental start-up.

ALWAYS wear adequate hearing protection while running your air powered screed.

• SOUND & VIBRATION ANALYSIS •

ENGINE	AVERAGE EQUIVALENT SOUND PRESSURE LEVEL	SOUND PRESSURE LEVEL AT OPERATOR'S EAR	EQUIVALENT SOUND POWER LEVEL
5.5 HP HONDA	92dB(A)	95dB(A)	109dB(A)
8 HP HONDA	89dB(A)	96dB(A)	106dB(A)

The information above was acquired through vibration and sound analysis taken here at AEC. We brought in a certified sound and vibration technician to test several of our products. All of the data collected was measured according to OSHA standards ISO 3744. If there are any questions on this particular subject, contact AEC Customer Service at 870-236-7751 or 800-643-0095.

OPERATIONS SECTION 1

• DIMENSIONAL PICTORIALS •

The dimensions of the engine driven screed in this manual are illustrated on this page. The height and width are in Figure 1 and the lengths of the different screed sections available are illustrated in Figure 2.

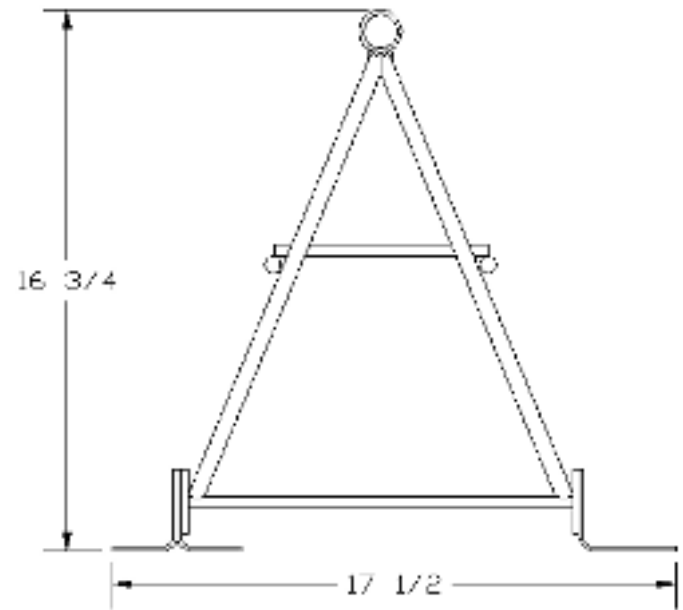
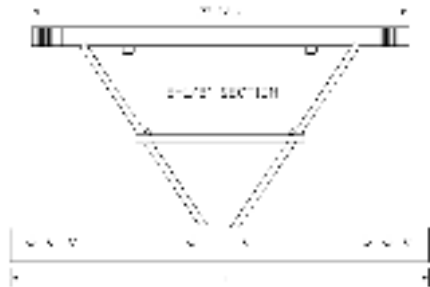


FIGURE 1

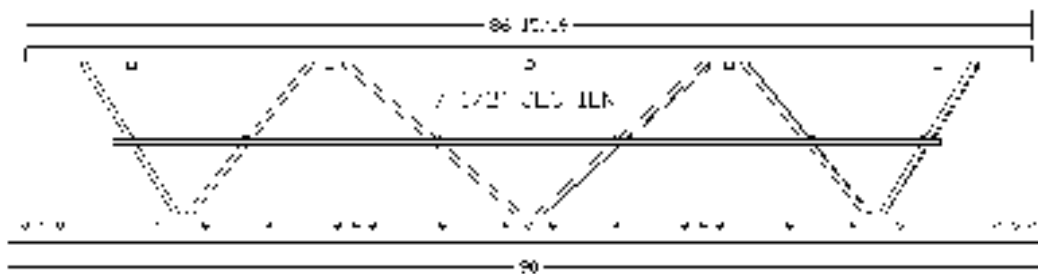
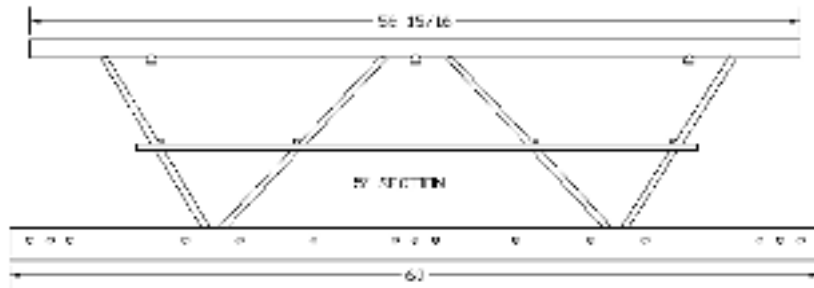


FIGURE 2

• TECHNICAL DATA •

OPERATIONS SECTION 1

SPECIFICATIONS ON THE STEEL TRUSS FRAME:

MODEL	TRUSS BLADES	7 1/2' lbs/kg	5' lbs/kg	2 1/2' lbs/kg	MAXIMUM WIDTHS
12QD	HARD COAT ALUMINUM	82.5	55.5	30.5	60'

- Top pipe coupling system - Fine thread adjustment 1 5/16-16tpi with full flow 1" non-restricting air system with dual locking jam nuts.
- Vibration proof welds with exclusive vibration-dampening system.
- Bolt-on blades with quick connecting splice plates front and back at each truss section using 1/2-13 nuts and bolts throughout.
- Balanced design truss height to overall base width provides equilateral triangle strength for obtaining precise grade control and structure integrity.
- Top pipe coupling system provides for crowned or invert slab section without loosening bottom splice blade bolts. Special crowns or inverts are obtainable with ball joint top pipe coupler or crown invert bracket. Crowns greater than 1/8"/ft are considered special.
- NOTE: Select screed width to allow minimum overhangs past forms; 6" overhangs are Ideal, overhangs over 12" are not recommended.

SPECIFICATIONS ON THE ROTATING ECCENTRIC SHAFT (RES) VIBRATORY SCREED:

MODEL	ENGINE KITS		8" END	LOW PROFILE		DUAL
CENTRIFUGAL	5.5 HP	8 HP	MOUNT	MOUNT	BELTS	CLUTCH
HONDA						
12 QD	X	X	X	X	X	X

- Rotating Eccentric Shaft (RES) produces over 8000 vibration cycles per min.
- 3/4" diameter high alloy steel plated shaft with 1 3/8" diameter dual eccentric vibrators mounted on 30" centers. Running in 3/4" diameter pillow block bearings with shaft locking collars.
- ENGINE SPEED: up to 3600 RPM with throttle control.
- Vibrator shaft with synchronization key way and four each square head set screws mounted with an intermediate bearing support.
- Eccentric vibrators attached to shaft with 1/4" bolt and stover lock nut.
- Crowned Selections - Up to 1/8"/ft use flex couplers, over 1/8"/ft crown use u-joint kit. Screeds are shipped standard with rigid shaft couplers for running flat without crowns.

OPERATIONS SECTION 1

• BEFORE STARTING •

Before starting the engine driven screed, there are a few items that need to be looked over.

- Make sure bolts are secure and will not vibrate loose.
- Check jam nuts on top pipe to ensure that they are tight against the top pipe coupler.
- Check the hydraulic level in the tank for the hydraulic winches (if applicable).
- Check winch cables to make sure that they will not loosen during the screed run.
- Look over the forms to check for unevenness so that the screed will not hang up.

Ask yourselves these questions when preparing your screed for a job.

- What is the “exact” pour width?
- What is the slump?
- Is the slab flat, crowned, or inverted?
- What is the required surface tolerance?
- Are any accessories required?
- Do the winches work properly?
- Are the hydraulic pressure settings OK?

• OPERATING •

Operating your engine driven screed correctly will greatly effect the outcome of the pour. Follow the check list below to operate your screed correctly and you will be very pleased with your equipment.

THE JOB SITE:

FORMS

- Are they stable?
- Will they support the weight of the screed?
- Have the form pins been driven below the top of the forms?
- Can the screed pass from form to form without getting caught?

COLUMNS & WALLS

- Screed size is important.
- How will you go through the columns?
- Consider the use of HD winches & 6" extension handles.
- What do you do when your up against a wall?
a) wall bracket b) pipe rail c) form

CONCRETE

- Are there any mix characteristics or additives that effect the performance of the screed?
- Will the supply of concrete be steady or intermittent?
- Be aware of the importance of WEATHER!

THE CREW

- Two key people should be trained to operate the screed.
- The screed is a finishing machine. There is a technique to its operation. The TRAVEL SPEED, the VIBRATORY FREQUENCY, and the FEEDING of the screed must all be controlled.
- Knowing how the winches operate before you start is essential.
- To what do you hook the cables, and when do you move them?
- Pay attention to safety with the cables.
- Tools and spare parts should be available for use.

• PERIODIC MAINTENANCE SCHEDULE •

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The following list below contains information regarding the maintenance and operations procedures that must be followed to improve the life of your machine. A well maintained piece of machinery will provide you years of satisfaction.

- Use Loctite anti-seize MIL A 907D to lubricate the top pipe coupler threads before assembly.
- Oil winch bushings at 10 hr. operation intervals. Use light lubricating oil.
- CAUTION! Change worn or frayed cables - cables under tension may snap and cause severe injury. Use proper methods illustrated in this manual to properly attach cables. Wrap cable under last form pin then connect cable hook to the next form pin towards the screed.
- DO NOT hook cables to a stake driven into the ground. The stake can tilt and allow cable under tension to snap back and cause severe injury.
- CAUTION! For screeds over 75 ft. in length consult the factory.
- CAUTION! When installing pillow block bearings, be sure that the bottom flat surface does not have nicks or deep marks. This can cause the bearing to ride off of the mounted surface. When vibration occurs this small deformation can wear off quickly, allowing the bearing to loosen. With the bearing loose on its mounting, failure can occur.
- Grease screed bearings at 40 hr. operating intervals. Use one stroke of a hand grease gun. Use Shell Alvonia #21, Texaco I-15, Chevron SR1. Clean fittings before greasing. For low temperatures, use Dow Molykote BR-2. DO NOT OVERGREASE.
- For cold weather operations, use bearing lubricant Allen BR-2. This grease flows at ambients of -22° F thru 356° F.
- Always make sure that the drive shaft is aligned properly. To make sure that you do this correctly, you will need to utilize AEC tool part number 020255.
- When connecting drive shafts, assemble with all the weights on each section facing the bullfloat blade. If weights are mis-matched, the screed will not vibrate properly. Match the keyways on

OPERATIONS SECTION 1

• LIFTING PROCEDURES •

The following procedures describe proper lifting techniques for the screed. There is no OSHA standard weight limit for manual lifting. Therefore, rather than stating a regulated limit, they ask that employers or contractors do the following:

- A) Identify each hazard to which a person at the work place (jobsite) is likely to be exposed.
- B) Assess the risk of injury or harm to a person resulting from each hazard.
- C) Consider the means by which the risk may be reduced.

NOTE: Never lift more than what you personally feel that you can handle.

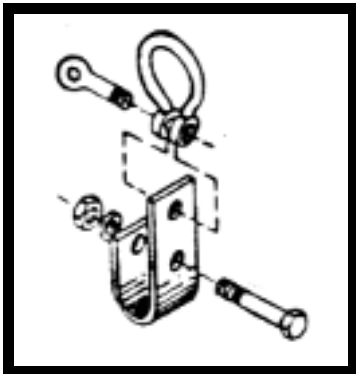
The lifting handles at each end of the screed are not intended to be used as the only source to lift the screed. It is quite obvious that two large men will not be able to lift 70 feet of screed. The following list of maximum screed lengths is very important so that the length of your screed will not be too long.

SX SCREED - MAXIMUM 60 FEET

HD SCREED - MAXIMUM 60 FEET

SHD SCREED - MAXIMUM 60 FEET

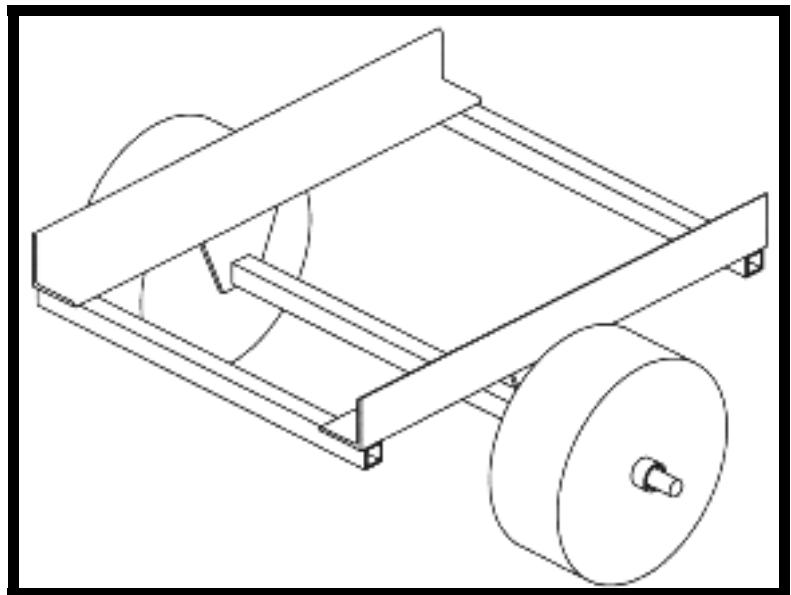
For proper lifting of an average screed (30 ft.), the screed lifting hook is an ideal item to use. This instrument should be placed at equal distances from each end. A special lifting bridle is then used by a forklift, crane, front-end loader, etc. to raise and transport the screed. Also available from Allen Engineering is the screed cart. This item is used to move the screed around on the job site only.



LIFTING HOOK PART #
532000

**STANDARD SCREED CART
MAXIMUM 500 lbs. - 543000**

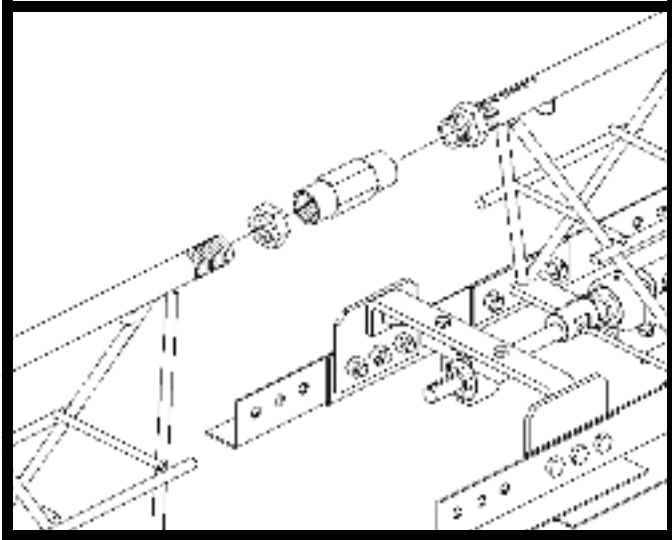
**HEAVY DUTY SCREED CART
MAXIMUM 1,000 lbs. - 543001**



• SECTION ASSEMBLY •

OPERATIONS SECTION 1

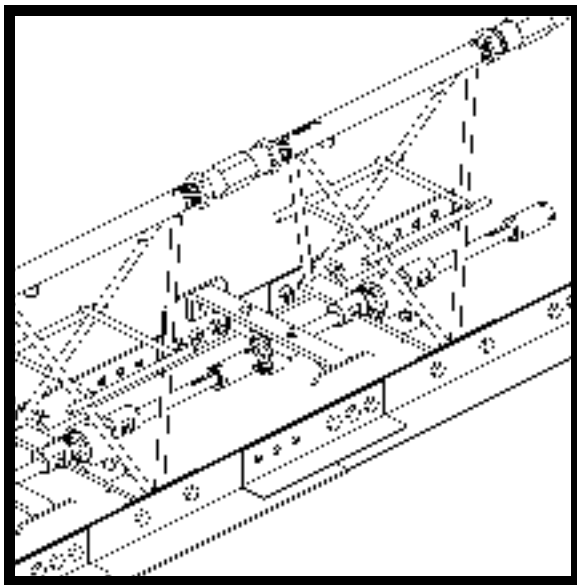
The following figures illustrate the instructions for correctly assembling engine driven screed. Make sure that you follow the instructions in order. If the assembling of your screed is not done in this order, there could be some problems in trying to maintain floor flatness because your screed is not level. Levelness of your screed is critical!



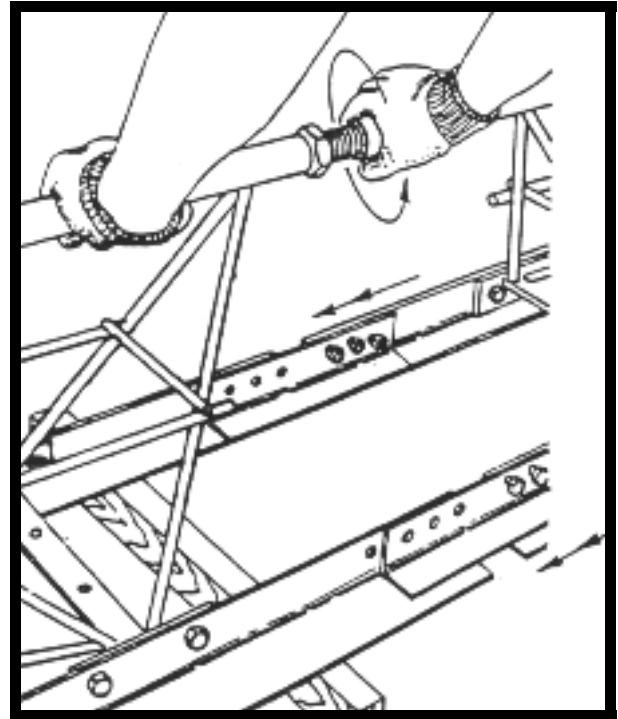
STEP 1: Screw jam nuts onto top pipe. Start the top pipe coupler onto the top pipe of the mating truss section. Only thread the coupler on about three turns.

NOTE: The right and left hand jam nuts will already be installed on the screed section.

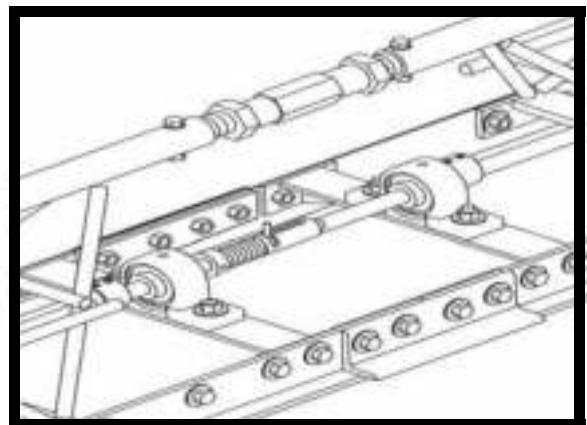
TIGHTEN JAM NUTS AFTER SCREED IS LEVEL



STEP 3: Bearing support bolts should be loose so that splice plate can move in clearance holes. With 15" adjustable wrench, turn top pipe coupler until screed and bull float blades contact, then back the coupler off slightly so that the blades touch without tension.



STEP 2: Slide screed sections together until top pipe threads on screed marked "R" line up with threads in coupler on the screed. Start coupler on adjoining threads by hand to prevent cross threading.

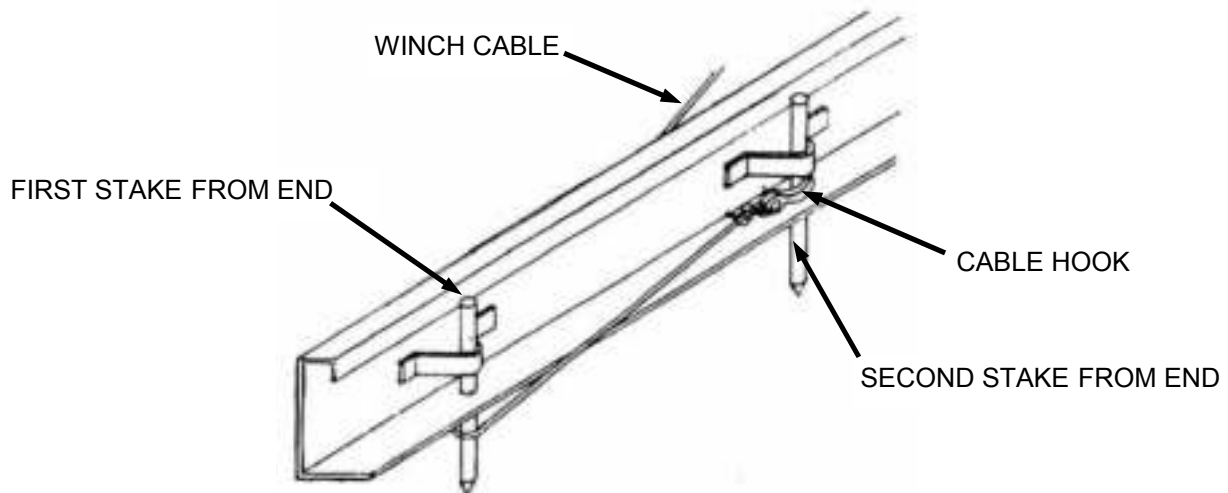


STEP 4: Tighten bolts on splice plates. Next slide the shaft coupler onto the adjoining section. Repeat these steps for attaching all engine driven

OPERATIONS SECTION 1

• ATTACHING WINCHES TO FORM STAKES •

The figure below illustrates the proper way to attach the winch cables to the form stakes. This is the only way that the cables should be attached. If the cables are not attached properly, the cables could snap loose causing severe injury to finishing personnel surrounding the screed.



To attach the winch cables properly, adhere to the following instructions.

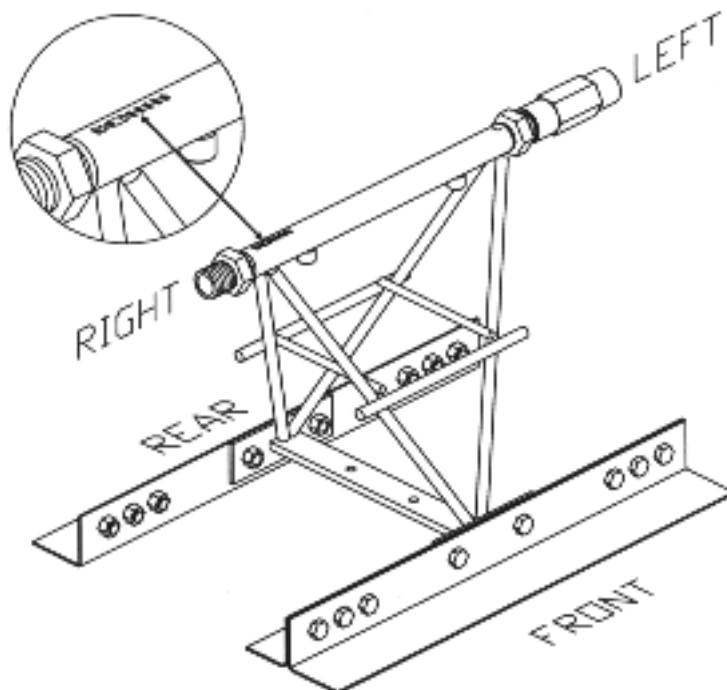
- Take the cable and go around the last form stake. Make sure that you go underneath the form.
- Attach the cable hook to the next form stake from the end.
- Always insure that

• DETERMINING LEFT AND RIGHT OF

The following illustration shows all the key information on how to determine the left and right and the front and rear of a screed section.

Note the circle with the serial number.

This is probably the easiest way to determine the left and right sides of the screed assembly. The right side has the model number and a five digit serial number. The left hand side is only stamped with an "L". Also the front of the screed is determined by the two screed blades mounted back-to-back. The rear of the screed has only one bullfloat blade.



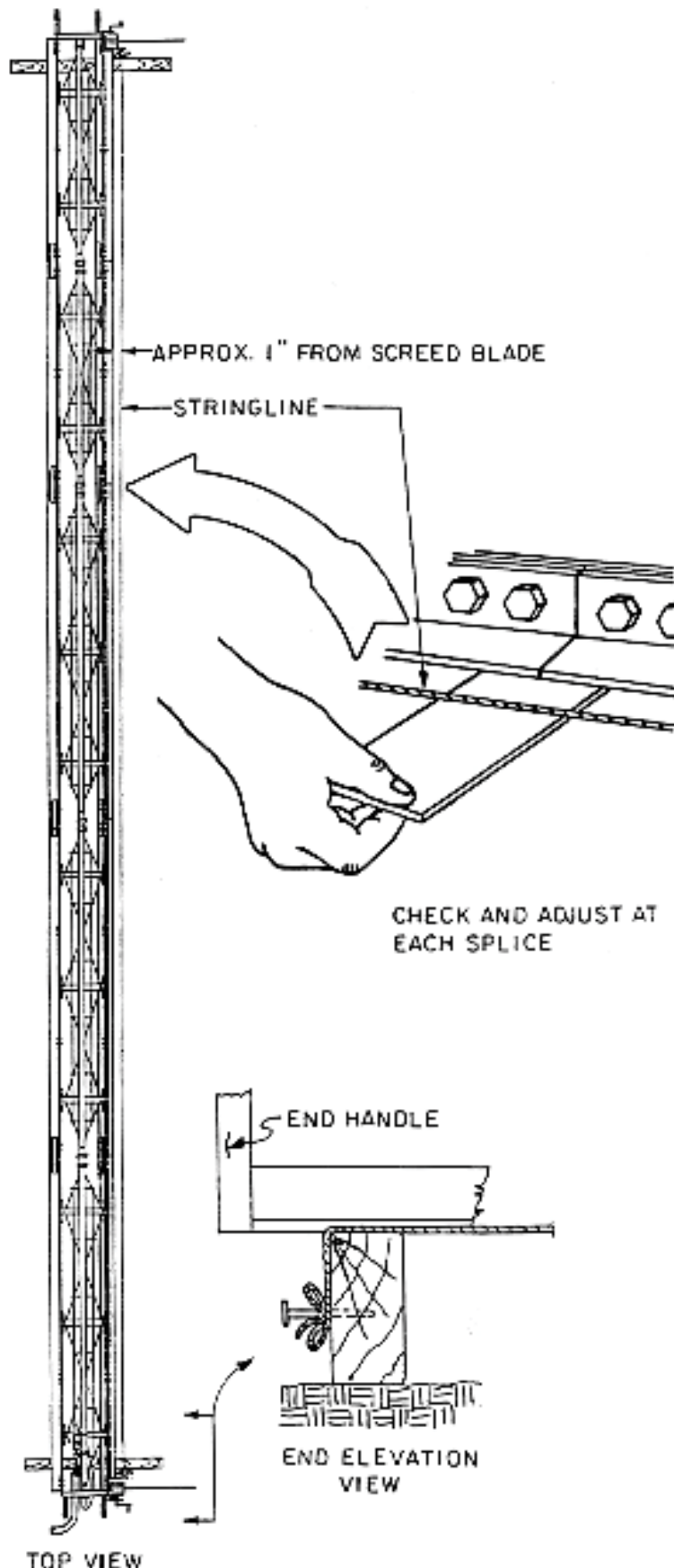
• STRING LINING •

OPERATIONS SECTION 1

To string line your screed, there are a few important steps that need to be followed.

- Place screed ends on a 2 x 6 or other wooden type support.
- At approximately 1" out from the leading edge of the screed blade, drive a nail into the wooden support. NOTE: Nail should be on the outside of the wooden support.
- Stretch a line as tight as possible from nail to nail. Make sure that the nail is contacting each support at the point of blade contact.
- NOTE: The supports do not have to be on the same level.
- Use a short, flat piece of metal or wood as a gauge block to compare the string to the bottom surface of the screed blade and bullfloat blade.
- The blades should be equal to each other at each splice. If they are not even, loosen jam nuts and tighten top pipe coupler as described on page S1-12.

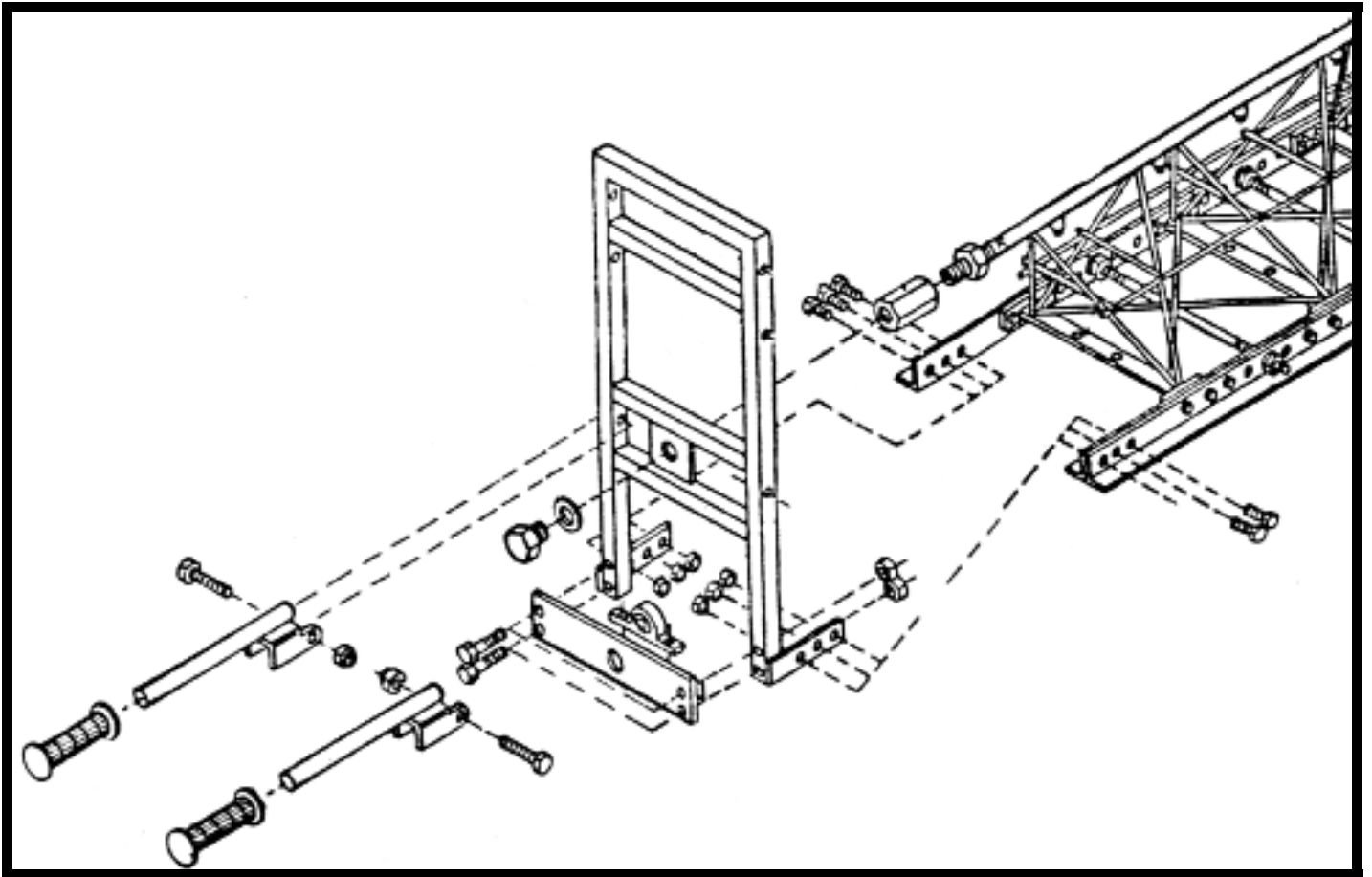
NOTE: Always string line your



OPERATIONS SECTION 1

• END HANDLE ASSEMBLY •

The following figure shows the proper way to mount a standard end handle to the screed section. Do not try to modify this mounting procedure. This is the only way to mount the end handles where they will work properly.



Follow the steps below to properly mount the end handles to your screed.

- Mount the bearing onto the bearing support bracket.
- Mount the handle grips onto the lifting handles.
- Mount the lifting handles onto the end handle using two 3/8 x 2 bolts and 3/8 nylon lock nuts.
- Mount the bearing support bracket to the end handle using four 1/4 x 1 1/2 bolts and 1/4 stover nuts.
- Mount the end handle to the screed using three 1/2 x 3/4 bolts, three 1/2 x 1 bolts and six 1/2 hex nuts. Screw the appropriate adaptor for the end you are working on onto the top pipe. Next, using

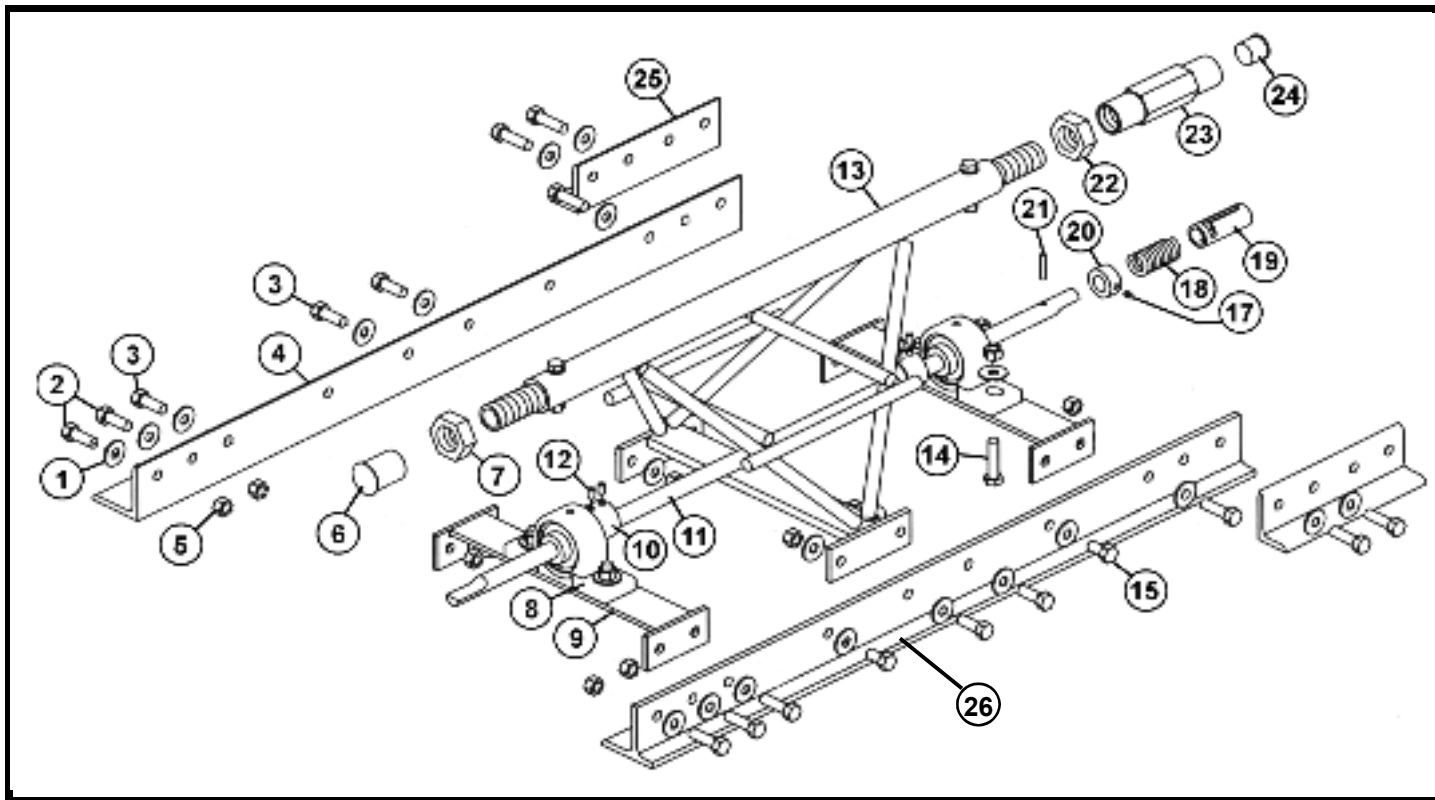
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PARTS SECTION 2

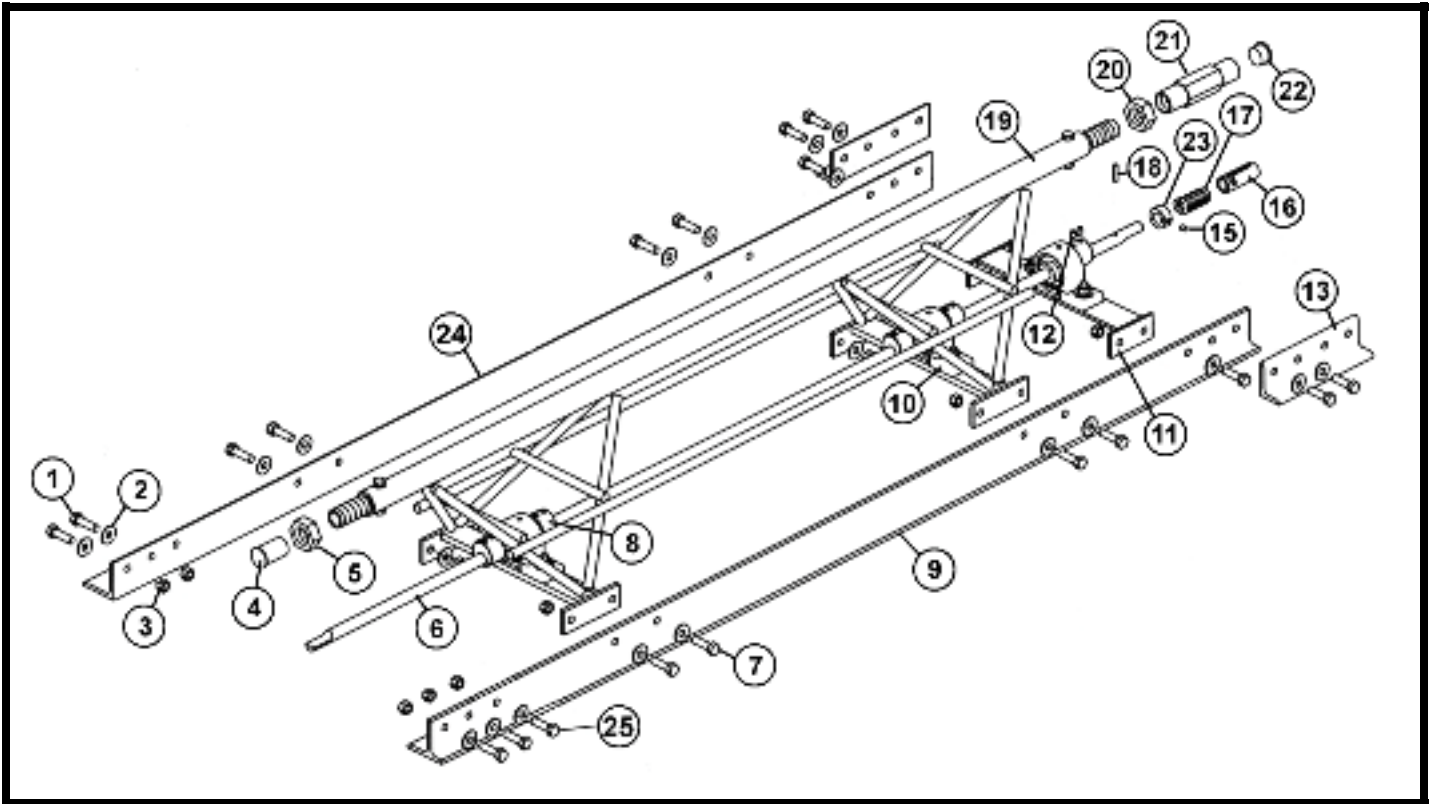
• ASSEMBLY 2-1/2' SECTION •



PART #	DESCRIPTION	QTY.
1. 011490	FSTN, FLATWASHER 1/2 HARDENED	22
2. 010068	BOLT, 1/2-13 x 1-1/4	6
3. 010067	BOLT, 1/2-13 x 1	4
4. 032369	BLADE, BULLFLOAT	1
5. 010106	NUT, HEX 1/2-13	16
6. 020477	CAPLUG, EC TOP PIPE	1
7. 108000	NUT, RH JAM	1
8. 017619	BEARING 5/8 PB	2
9. 032928	BEARING SUPPORT OFFSET	1
10. 038262	WEIGHT, ECCENTRIC	2
11. 017438	SHAFT, 2-1/2' DRIVE	1
12. 018999	SET SCREW 1/4-28 x 3/8	4
13. 036409	TRUSS, 2-1/2'	1
14. 028402	BOLT, 3/8-16 x 1-1/2	4
15. 010035	BOLT, 3/8-16 x 3/4	2
16. 000000	NOT SHOWN	
17. 010316	SET SCREW, 1/4-20 x 1/4	1
18. 017538	SPRING, F/ 10QX	1
19. 017539	COUPLER, SHAFT	1
20. 017540	COLLAR, SET 5/8"	1
21. 010478	PIN, ROLL 3/16 x 1	1
22. 108001	NUT, LH JAM	1
23. 107000	COUPLER, TOP PIPE (EC)	1
24. 020274	CAPLUG, EC TOP PIPE COUPLER	1
25. 025812	PLATE, SPLICE	2
26. 032368	BLADE, SCREED	1

• ASSEMBLY 5' SECTION •

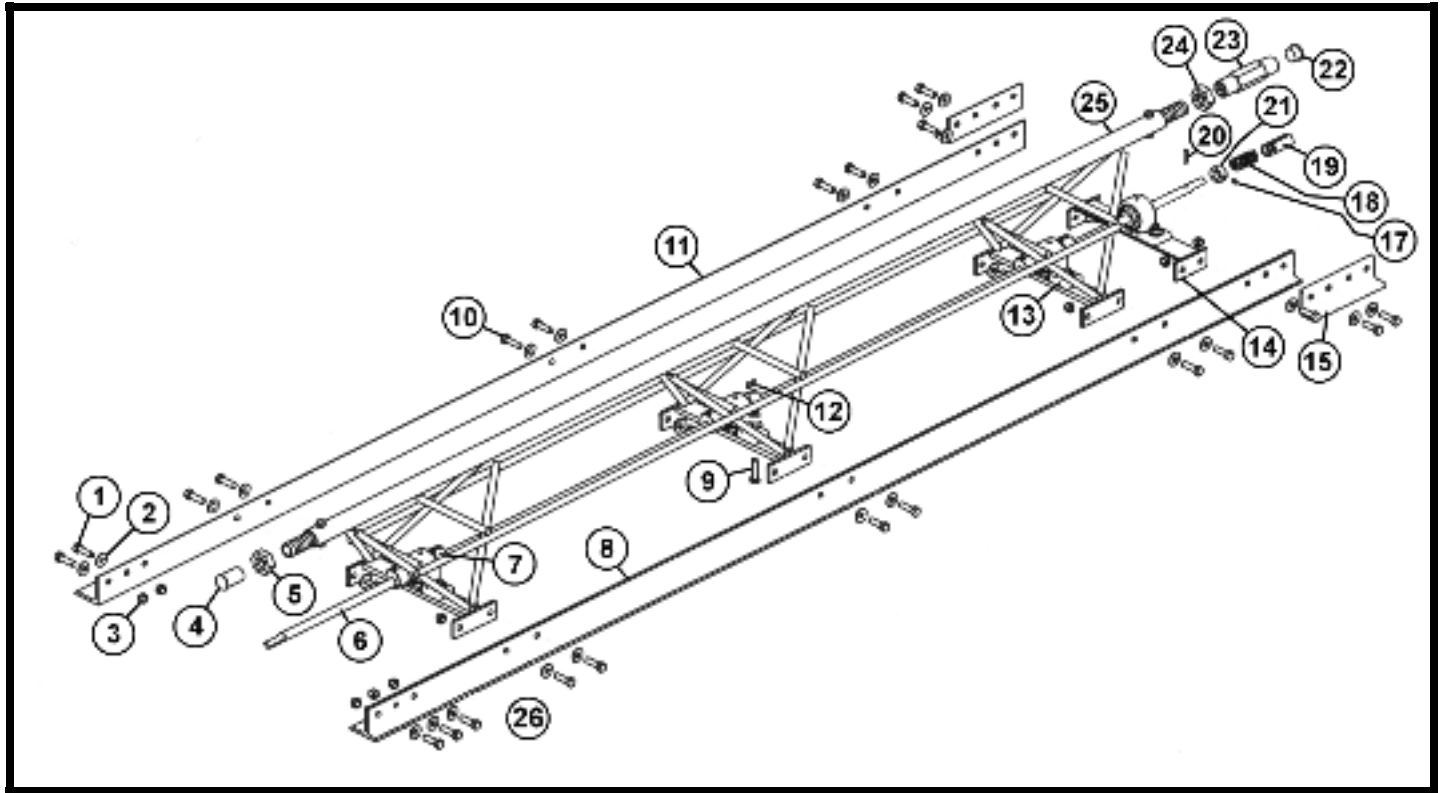
PARTS SECTION 2



PART #	DESCRIPTION	QTY.
1. 010068	BOLT, 1/2-13 x 1 1/4	8
2. 011490	FSTN, FLATWASHER 1/2 HARDENED	26
3. 010106	FSTN, 1/2-13 HEX NUT	20
4. 020477	CAPLUG, EC TOP PIPE	1
5. 108000	NUT, RH JAM	1
6. 017441	SHAFT, 5'	1
7. 010067	BOLT, 1/2-13 x 1	8
8. 038262	WEIGHT, ECCENTRIC	4
9. 025810	BLADE, SCREED 5'	1
10. 017619	BEARING, 5/8 PB	3
11. 032928	BEARING SUPPORT OFFSET	1
12. 018999	FSTN, SET SCREW 1/4-28 x 3/8	8
13. 025812	PLATE, SPLICE	2
14. 000000	NOT SHOWN	
15. 010316	FSTN, SET SCREW 1/4-20 x 1/4	1
16. 017539	COUPLER, SHAFT	1
17. 017538	SPRING	1
18. 010478	FSTN, ROLL PIN 3/16 x 1	1
19. 036399	TRUSS 5'	1
20. 108001	NUT, LH JAM	1
21. 107000	COUPLER, TOP PIPE (EC)	1
22. 020274	CAPLUG, TOP PIPE COUPLER	1
23. 017540	COLLAR, SET 5/8	1
24. 025807	BLADE, BULLFLOAT 5'	1
25. 010035	BOLT, 3/8-16 x 3/4	2

PARTS SECTION 2

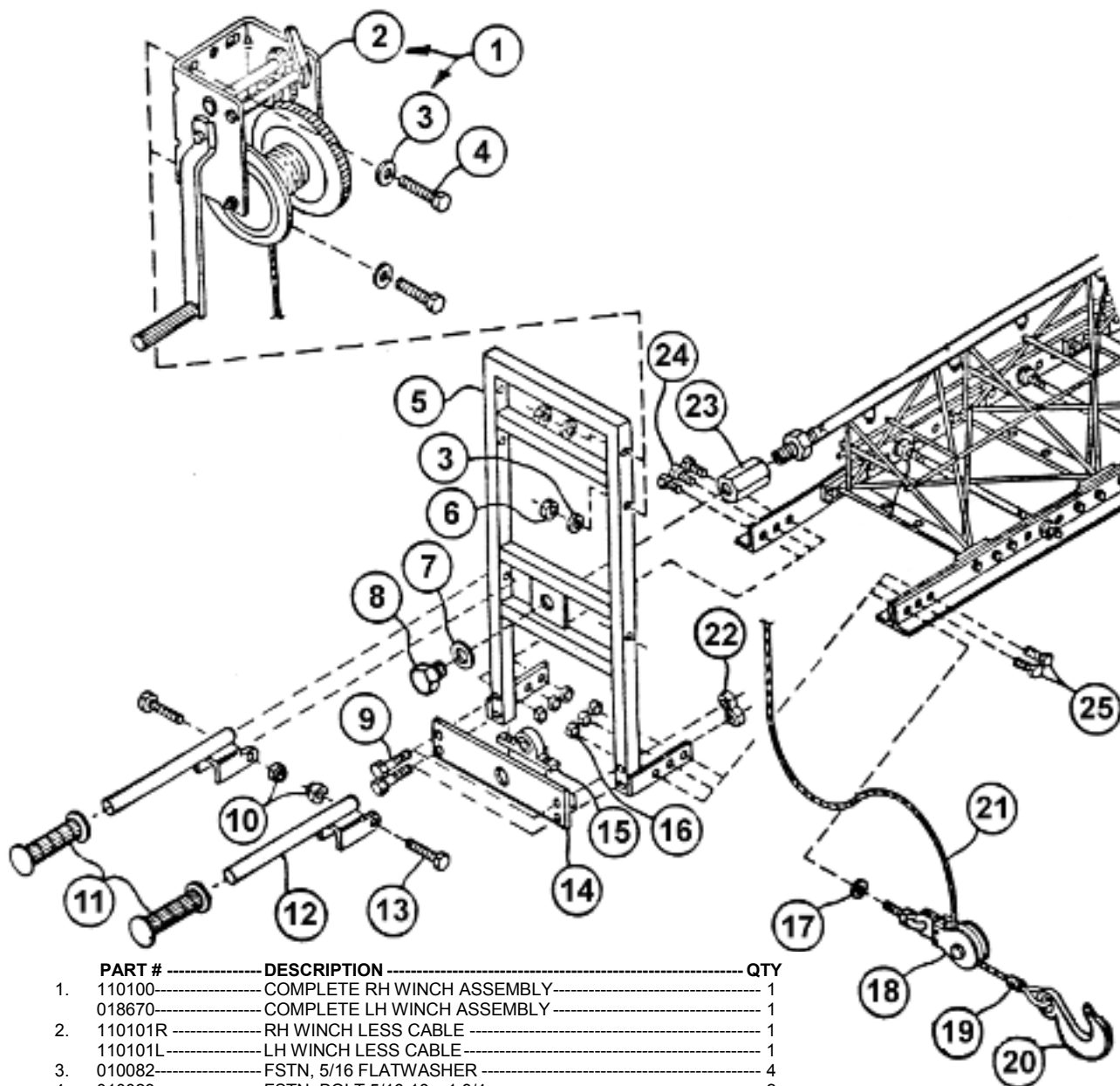
• ASSEMBLY 7-1/2' SECTION •



PART #	DESCRIPTION	QTY.
1. 010068	BOLT, 1/2-13 x 1 1/4	6
2. 011490	FSTN, FLATWASHER 1/2 HARDENED	30
3. 010106	FSTN, 1/2-13 HEX NUT	24
4. 020477	CAPLUG, TOP PIPE	1
5. 108000	NUT, RH JAM	1
6. 017444	SHAFT, 7 1/2'	1
7. 038262	WEIGHT, ECCENTRIC	6
8. 025809	BLADE, SCREED 7-1/2'	1
9. 010069	BOLT, 1/2-13 x 1-1/2	6
10. 010067	BOLT, 1/2-13 x 1	12
11. 028838	BLADE, BULLFLOAT 7-1/2'	1
12. 018999	FSTN, SET SCREW 1/4-28 x 3/8	12
13. 017619	BEARING, 5/8 PB	3
14. 032928	BEARING SUPPORT OFFSET	1
15. 025812	PLATE, SPLICE	2
16. 000000	NOT SHOWN	
17. 010316	FSTN, SET SCREW 1/4-20 x 1/4	1
18. 017538	SPRING	1
19. 017539	SHAFT COUPLER	1
20. 010478	FSTN, ROLL PIN 3/16 x 1	1
21. 017540	COLLAR, SET 5/8	1
22. 020274	CAPLUG, EC TOP PIPE COUPLER	1
23. 107000	TOP PIPE COUPLER (EC)	1
24. 108001	NUT, LH JAM	1
25. 036403	TRUSS, 7-1/2'	1
26. 010035	BOLT, 3/8-16 x 3/4	2

• END HANDLE ASSEMBLY •

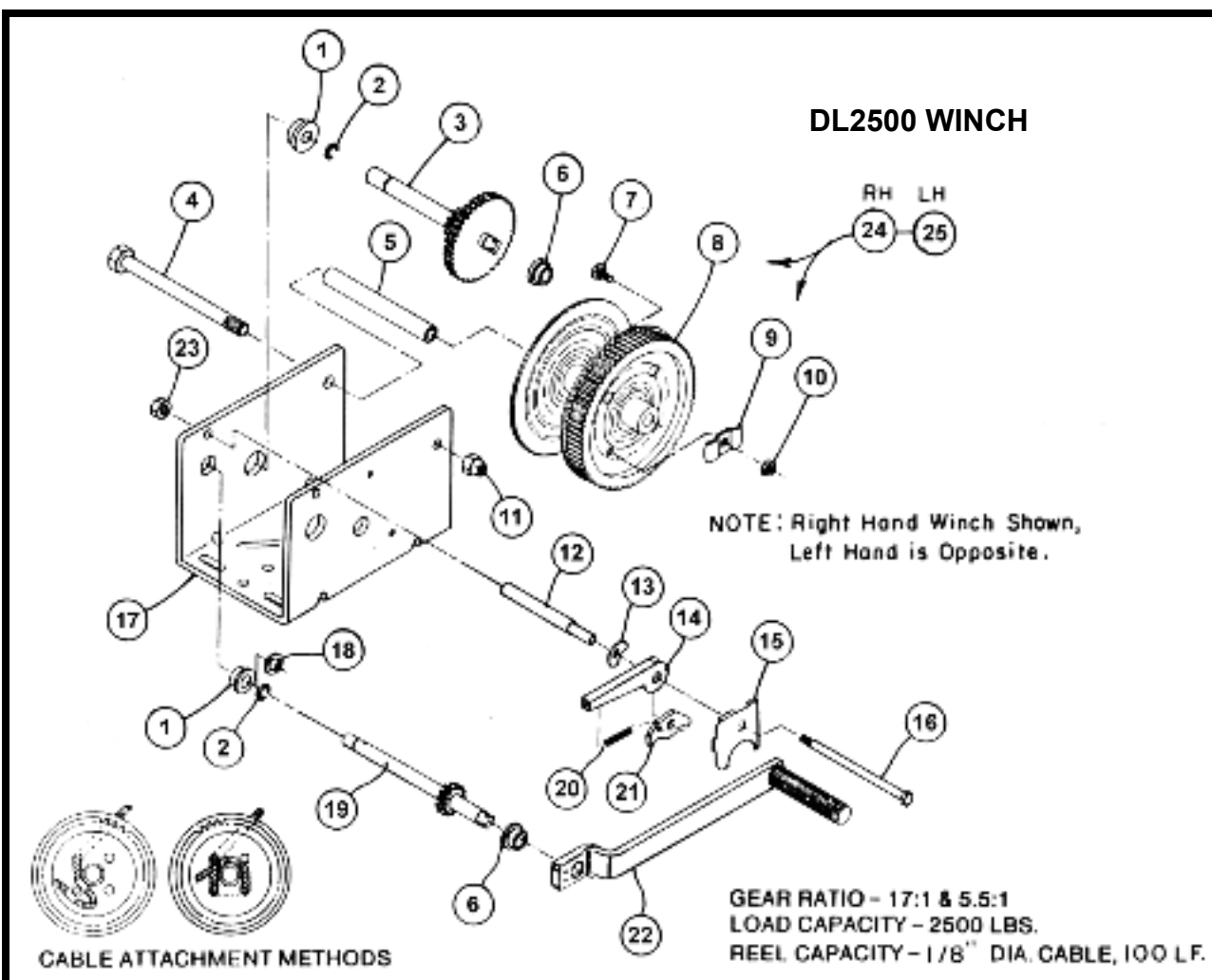
PARTS SECTION 2



PART #	DESCRIPTION	QTY
1. 110100	COMPLETE RH WINCH ASSEMBLY	1
018670	COMPLETE LH WINCH ASSEMBLY	1
2. 110101R	RH WINCH LESS CABLE	1
110101L	LH WINCH LESS CABLE	1
3. 010082	FSTN, 5/16 FLATWASHER	4
4. 010023	FSTN, BOLT 5/16-18 x 1 3/4	2
5. 109000	END HANDLE	1
6. 010100	FSTN, NUT 5/16	2
7. 010088	FSTN, 1" FLATWASHER	1
8. 113000	FSTN, NUT F/ END HANDLE	1
9. 010005	FSTN, BOLT 1/4-20 x 1 1/2	4
10. 010464	FSTN, NUT NYLON LOCK 3/8-16	2
11. 015767	HANDLE GRIP	2
12. 017066	LIFTING HANDLE	2
13. 010040	FSTN, BOLT 3/8-16 x 2	2
14. 112000	BEARING SUPPORT BRACKET	1
15. 020704	BEARING	1
16. 010106	FSTN, NUT HEX 1/2-13	6
17. 010085	FSTN, 1/2 FLATWASHER	1
18. 110005	PULLEY BLOCK W/ EYEBOLT	1
19. 012391	CABLE CLAMP	1
20. 110008	SLIP HOOK	1
21. 110103	CABLE F/ WINCH (1/8 AIRCRAFT)	100 ft.
22. 020542	FSTN, NUT STOVER LOCK 1/4-20	4
23. 114000	ADAPTOR, R.H. AIR END	1
115000	ADAPTOR, L.H. AIR END	1
24. 010066	FSTN, BOLT 1/2-13 x 3/4	3

PARTS SECTION 2

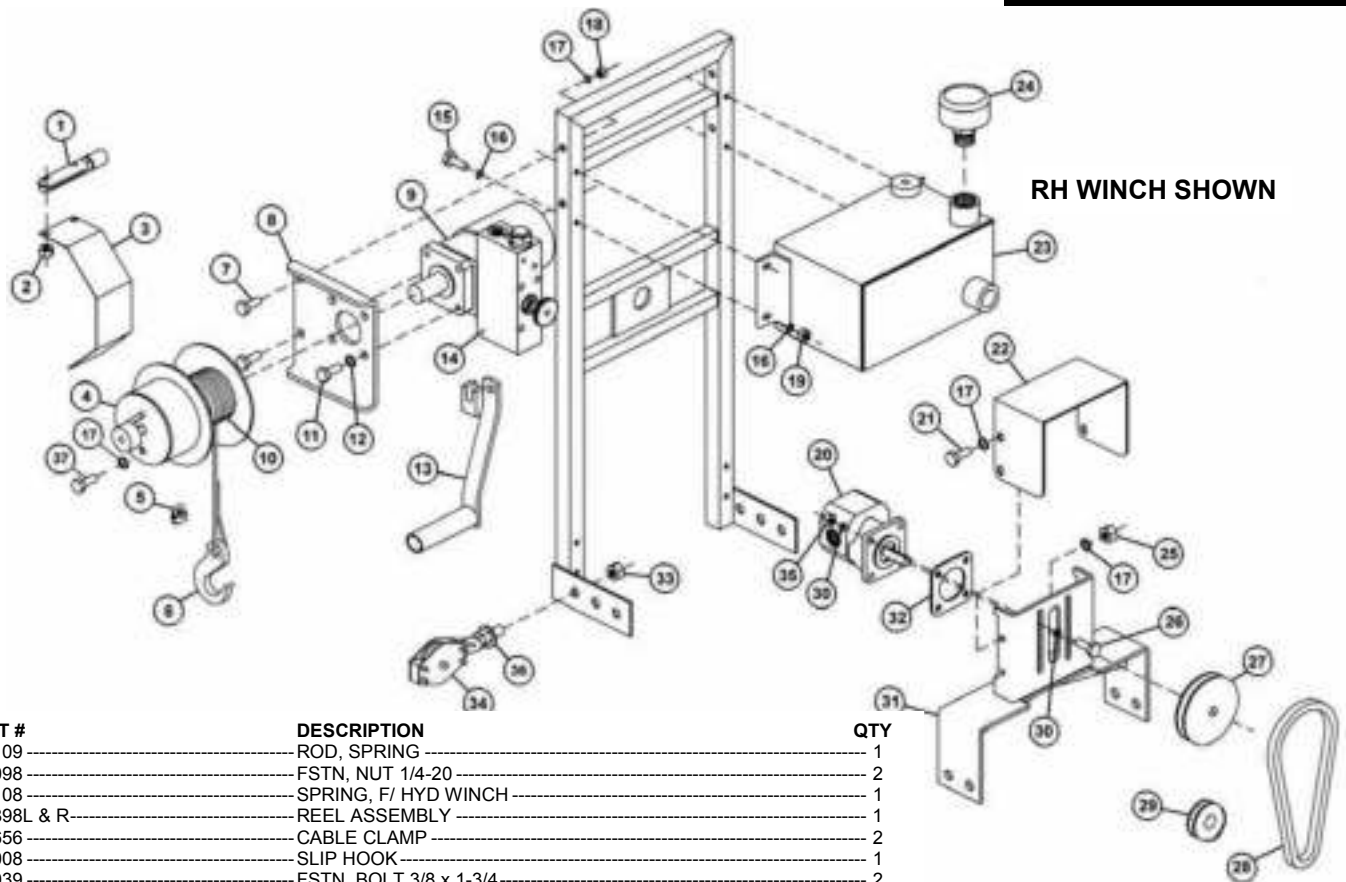
• WINCH ASSEMBLY •



PART #	DESCRIPTION	QTY
1. 250002	BUSHING	2
2. 250003	E-RING	2
3. 250022	INTERMEDIATE DRIVE SHAFT	1
4. 250014	SHAFT REEL	1
5. 012826	SPACER	1
6. 250024	BUSHING	2
7. 120013	FSTN, BOLT CARRAGE 1/4 x 3/4	1
8. 250017	WINCH REEL 2 1/2 DIA	1
9. 120012	CABLE CLAMP	1
10. 120011	FSTN, NUT HEX 1/4	1
11. 120015	FSTN, STOVER LOCK 3/8	1
12. 250009	SLEEVE RATCHET	1
13. 120017	COMPRESSION SPRING	1
14. 120018	LEVER RATCHET	1
15. 020471	PLATE, LATCH LH	1
250026	PLATE, LATCH RH	1
16. 250007	BOLT, RATCHET	1
17. 250001	BASE WINCH, 2500	1
18. 250025	SPACER	1
19. 250006	DRIVE SHAFT	1
20. 120021	SPRING EXTENSION	1
21. 120020	PAWL RATCHET	1
22. 110102	HANDLE	1
23. 120016	FSTN, NUT STOVER LOCK 1/4	1
24. 110101R	HD WINCH RH (WINCH ONLY)	1
25. 110101L	HD WINCH LH (WINCH ONLY)	1

• HYDRAULIC WINCH ASSEMBLY •

PARTS SECTION 2



RH WINCH SHOWN

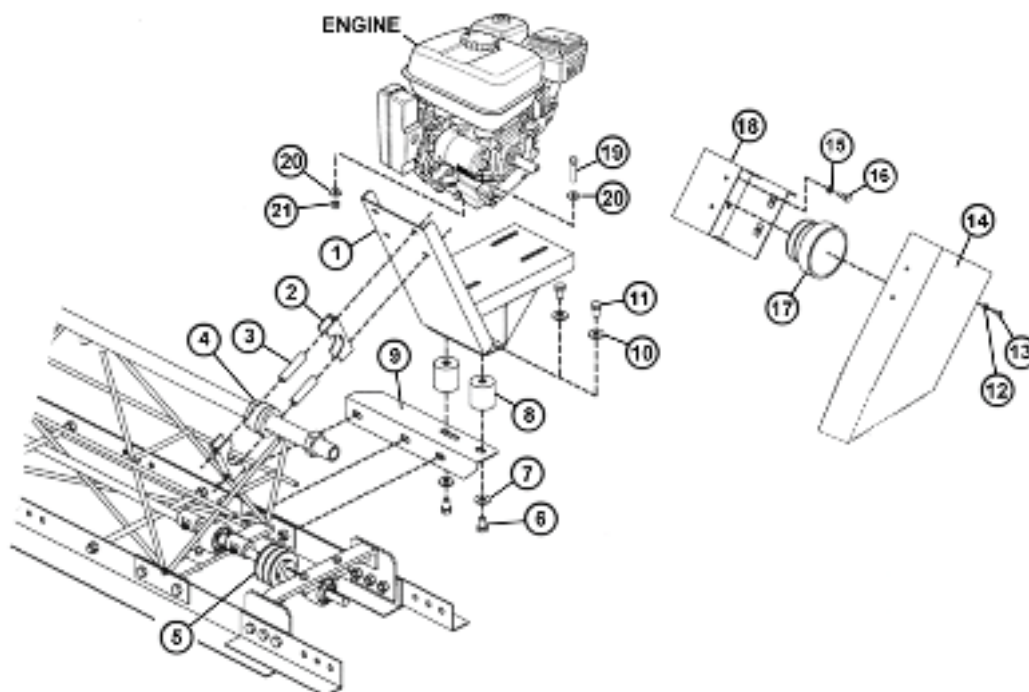
PART #	DESCRIPTION	QTY
1. 029109	ROD, SPRING	1
2. 010098	FSTN, NUT 1/4-20	2
3. 029108	SPRING, F/ HYD WINCH	1
4. 027898L & R	REEL ASSEMBLY	1
5. 022656	CABLE CLAMP	2
6. 110008	SLIP HOOK	1
7. 010039	FSTN, BOLT 3/8 x 1-3/4	2
8. 029112	REEL BRACKET	1
9. 034011	MOTOR, HYDRAULIC	1
10. 000751	CABLE 1/8" (AIRCRAFT STYLE)	100'
11. 010036	FSTN, BOLT 3/8-16 x 1	4
12. 010091	FSTN, 3/8 LOCK WASHER HARDENED	4
13. 027906L & R	HANDLE, MANUAL WINCH	1
14. 029107	VALVE BLOCK	1
15. 010005	FSTN, BOLT 1/4-20 x 1 1/2	4
16. 010081	FSTN, 1/4 FLATWASHER	8
17. 017751	FSTN, 3/8 FLATWASHER HARDENED	4
18. 010464	FSTN, NUT NYLON 3/8	2
19. 020542	FSTN, NUT STOVER 1/4-20	4
20. 029105L & R	PUMP, HYDRAULIC	1
21. 010019	FSTN, BOLT 5/16-18 x 3/4	4
22. 027903	PUMP COVER	1
23. 029117	TANK, HYDRAULIC (RH)	1
029116	TANK, HYDRAULIC (LH)	1
24. 034013	CAP, FILLER BREATHER	1
25. 010109	FSTN, NUT NYLON 5/16-18	4
26. 010021	FSTN, BOLT 5/16 x 1 1/4	4
27. 010500	PULLEY 1/2"	1
28. 026486	V-BELT	1
29. 011896	PULLEY 3/4"	1
30. 010090	FSTN, HARD LOCKWASHER 5/16	8
31. 029114	PUMP BRACKET	1
32. 029111	PLATE	1
33. 010106	FSTN, NUT 1/2-13	1
34. 025992	PULLEY BLOCK HD W/ EYEBOLT	1
35. 010100	FSTN, NUT 5/16	4
36. 010085	FSTN, FLATWASHER 1/2	1
37. 010035	FSTN, BOLT 3/8 x 3/4	1
38. 221207	HOSE, INTAKE 1/2 TO MOTOR (NOT SHOWN)	1
39. 018344	HOSE ASSY. 3/8 PUMP TO WINCH (NOT SHOWN)	1
40. 221203	HOSE ASSY. 3/8 FLOW CONTROL TO TANK (NOT SHOWN)	1
41. 018355	HOSE ASSY. 3/8 FLOW CONTROL TO MOTOR (NOT SHOWN)	1
42. 221205	HOSE ASSY. 3/8 MOTOR TO RETURN (NOT SHOWN)	1
43. 012557	HOSE ADAPTOR FITTING, 3/4-3/8 HOSE (NOT SHOWN)	1
44. 012558	HOSE ADAPTOR 7/8-1/2 HOSE (NOT SHOWN)	1

**RH WINCH
027847R**

**LH WINCH
027847L**

PARTS SECTION 2

• LOW PROFILE ENGINE KIT •



PART#	DESCRIPTION	QTY.
1. 027872	ENGINE MOUNT F/ 8 HP ENGINE	1
028101	ENGINE MOUNT F/ 5 HP ENGINE	1
2. 027884	CLAMP, LOPRO ENGINE MOUNT	4
3. 027885	SPACER, F/ CLAMP	4
4. 027883	BUSHING, RUBBER SPLIT	2
5. 020698	PULLEY, 2BK30 x 3/4"	1
6. 010066	BOLT, 1/2 x 3/4	2
7. 011490	FSTN, FLATWASHER 1/2"	2
8. 012725	RUBBER ISOLATOR	2
9. 027871	BRACKET, ANGLE	1
10. 011490	FSTN, FLATWASHER 1/2"	2
11. 010066	BOLT, 1/2 x 3/4	2
12. 010081	FSTN, FLATWASHER 1/4"	4
13. 010002	BOLT, 1/4 x 3/4	4
14. 027877	BELT GUARD F/ 8 HP ENGINE	1
028102	BELT GUARD F/ 5 HP ENGINE	1
15. 010090	FSTN, LOCKWASHER 5/16"	4
16. 012974	BOLT, 5/16 x 3/4	4
17. 126003	CLUTCH, 1" BORE 2 GRV. 1300 F/ 8 HP ENGINE	1
100620	CLUTCH, 3/4" BORE 2 GRV. 1075 F/ 5 HP ENGINE	1
18. 027878	BELT GUARD BRACKET	1
19. 027882	BOLT, 3/8 x 3-3/4	4
20. 017751	FSTN, FLATWASHER 3/8"	4
21. 010102	FSTN, NUT HEX 3/8	4
22. 028328	V-BELT, B39 F/ 5.3 & 5.5 HP ENGINE (NOT SHOWN)	2
027917	V-BELT, B40 F/ 8 & 9 HP ENGINES (NOT SHOWN)	2
028325	V-BELT, B42 F/ 11 HP ENGINE (NOT SHOWN)	2

• END MOUNT ENGINE ASSEMBLY •

PARTS SECTION 2

QTY	PART #	DESC.
1.	020203	ENGINE 5.5 HP----
	020426	ENGINE 8 HP-----
2.	126001	HANDLE-----
3.	010273	KEY-----
4.	100620	CLUTCH-----
	126003	CLUTCH-----
5.		NOT USED
6.	010082	WASHER FLAT-----
	010084	WASHER FLAT-----
7.	020829	BOLT 5/16 x 1 3/4--
	017898	BOLT 7/16 x 1 1/2--
8.	010100	NUT HEX 5/16-----
	010102	NUT HEX 3/8-----
9.	010090	WASHER LOCK-----
	010091	WASHER LOCK-----
10.	010082	WASHER FLAT-----
	010083	WASHER FLAT-----
11.	114000	R.H. ADAPTOR-----
12.	113000	NUT, END-----
13.	010088	WASHER-----
14.	020514	NUT STOVER 3/8--
15.	027483	ENGINE MOUNT----
16.		NOT LISTED
17.		NOT LISTED
18.	010066	BOLT 1/2 x 3/4-----
19.	010067	BOLT 1/2 x 1-----
20.	010106	NUT, HEX 1/2-----
21.	010273	KEY-----
22.	020720	V-BELT-----
23.	020698	PULLEY-----
24.	010023	BOLT 5/16 x 1 3/4--
	010039	BOLT 3/8 x 1 3/4---
25.	010040	BOLT 3/8 x 2-----
26.	010464	NUT, NYLON-----
27.	017066	HANDLE-----
28.	015767	GRIP, HANDLE-----
29.	124000	THROTTLE ASS'Y--
30.	010002	BOLT 1/4 x 3/4-----
31.	020542	NUT, STOVER-----
32.	020983	MUFFLER-----
33.	010083	WASHER FLAT-----
34.	010091	WASHER LOCK-----
35.	010102	NUT, HEX-----
36.	010038	BOLT 3/8 x 1 1/2---

NOTE: * = ONLY USED ON 5.5 HP ENGINE

