

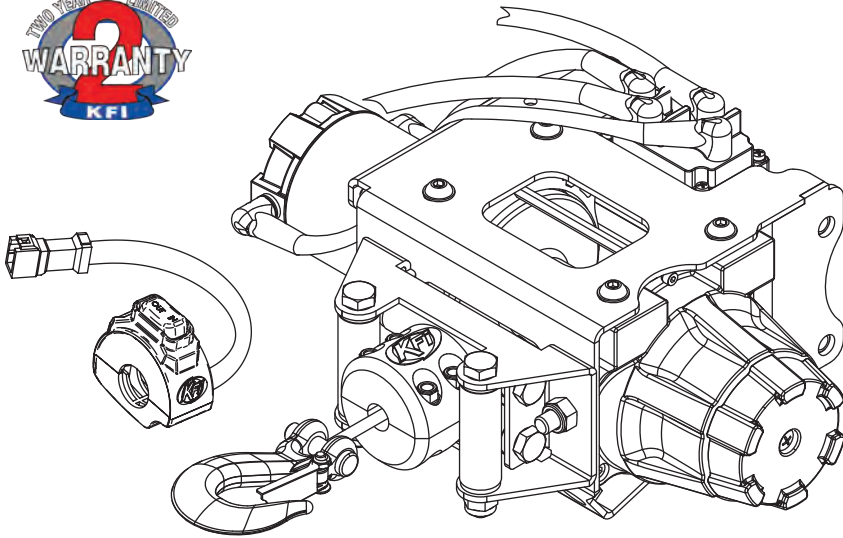


ASSAULT SERIES

SYNTHETIC CABLE
ATV/UTV WINCH

MODEL #ASP-35
3,500 LB. (1589 KG)

OPERATOR'S MANUAL



READ AND SAVE THIS MANUAL.

This manual contains important safety precautions which should be read and understood before operating the product.



Failure to do so could result in serious injury. This manual should remain with the product.

Specifications, descriptions, and illustrations in this manual are as accurate as known at the time of publication, but are subject to change without notice.

Place serial label here for reference.

SERIAL NO. LABEL

Support:

1-877-346-2050

or visit www.kfiproductions.com

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INTRODUCTION

Congratulations on your purchase of a KFI winch. KFI researches and develops winches to strict specifications. With proper use and maintenance, this winch will bring years of satisfying service.

Accessories

Kappers Fabricating, Inc. manufactures, purchases, and sells accessories designed to help you get the most from your purchase. To find out more about our products, visit our web site at:

www.kfiproducs.com

This Manual

Every effort has been made to ensure the accuracy and completeness of information in this manual. We reserve the right to change, alter, and or improve the product and this document at any time without prior notice.

Record the model as well as date and place of purchase for future reference. Have this information available when ordering parts and when making technical or warranty inquiries.

KFI TECHNICAL SUPPORT TEAM
1-877-346-2050
MODEL NUMBER
ASP-35
SERIAL NUMBER
DATE OF PURCHASE
PURCHASE LOCATION

SAFETY DEFINITIONS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attentions and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

⚠ DANGER DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

🗨 NOTICE NOTICE indicates information considered important, but not hazard-related (e.g. messages relating to property damage or physical injury).

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

⚠ WARNING Read this manual thoroughly before operating the winch. Failure to follow instructions could result in serious injury or death.

⚠ WARNING Do not exceed the rated capacity.

⚠ DANGER Do not use this winch for lifting or moving people or animals.

⚠ DANGER Keep yourself and others a safe distance to the side of the cable when under tension.

⚠ DANGER Never step over a cable or near a cable under load.

⚠ WARNING The cable may break before the motor stalls. For heavy loads at or near rated capacity, use a pulley block/snatch block to reduce the load on the cable.

⚠ WARNING Do not move the vehicle to pull a load (towing) on the winch cable. This could result in cable breakage.

⚠ WARNING Pull only on area of the vehicle as specified by the vehicle manufacturer.

⚠ WARNING Do not use the winch to secure or hold a vehicle for a long period of time. Do not use the winch to secure a vehicle for transport.

⚠ WARNING Disconnect the remote control and battery leads when not in use for extended periods.

⚠ WARNING Avoid “shock loads” by using the control switch intermittently to take up slack in the cable. “Shock loads” can far exceed the rated capacity for the winch cable and drum.

Do not accelerate your vehicle while winching. Loss of traction can cause a shock load on the cable. Do not use cable as a pull strap.

⚠ WARNING Batteries contain acid and produce explosive gases. Keep sparks, flames and cigarettes away from batteries at all times. Wear safety glasses and protect the eyes at all times. Do not lean over the batteries during operation.

⚠ WARNING Do not use as a hoist. Do not use for overhead lifting.

⚠ WARNING When re-spooling the cable, ensure that the cable spools in the under-wind position with the cable entering the drum from the bottom, not the top.

To re-spool correctly, and while wearing gloves, keep a slight load on the cable while pushing the remote button to draw in the cable. Walk toward the winch not allowing the cable to slide through your hands. Do not let your hands get within 12 in. of the winch while re-spooling. Turn off the winch and repeat the procedure until a few feet of cable are left. Disconnect the remote control and finish spooling by rotating the drum by hand with the clutch disengaged. Keep hands clear of the fairlead and drum while the winch is under power.

⚠ CAUTION If the motor stalls, do not maintain power to the winch.

Electric winches are designed and made for intermittent use and should not be used in constant duty applications.

⚠ CAUTION Never release the free spool clutch when there is a load on the winch.

⚠ CAUTION Use the Hand-Saver strap when handling the winch hook for spooling or unspooling the cable.

⚠ CAUTION Use gloves to protect hands when handling the cable. Never let the cable slide through your hands.

⚠ CAUTION Do not wrap the cable around any object and hook it back onto itself.

⚠ CAUTION Apply blocks to the wheels of the vehicle when on an incline.

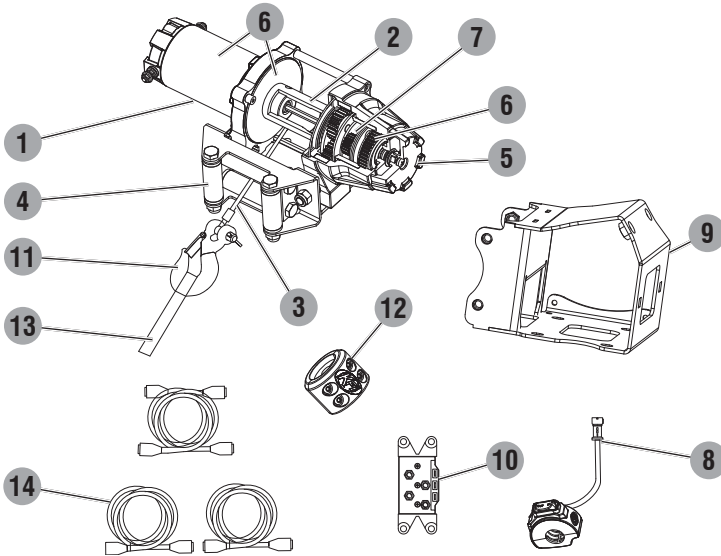
⚠ CAUTION Duration of winching pulls should be kept as short as possible.

If the motor becomes uncomfortably hot to the touch, stop winching immediately and let it cool down for a few minutes. Do not pull for more than one minute at or near the rated load.

CONTROLS AND FEATURES

Read this operator's manual before operating your winch. Familiarize yourself with the location and function of the control features. Save this manual for future reference.

Winch



- Motor** – 1.15 HP 12V DC motor provides power to the planetary gear mechanism.
- Winch Drum** – The winch drum is the cylinder on which the cable is stored. It can feed or wind the cable depending on the switch assembly.
- Synthetic Cable** – 3/16 in. x 50 ft. Synthetic cable designed specifically for load capacity of 3,500 lbs. (48 usable feet with five wraps on the drum). The synthetic cable feeds onto the drum in the “under wind” position through the roller fairlead (4) and is looped at the end to accept the clevis hook pin (11).
- Roller Fairlead** – When using the winch at an angle the roller fairlead acts to guide the synthetic cable onto the drum and minimize damage to the cable from abrasion on the winch mount or bumper.
- Free Spooling Clutch** – The clutch allows the operator to manually disengage (“Release”) the spooling drum from the gear train. Engaging the clutch (“Engage”) locks the winch into the gear system.
- Braking System** – Braking action is automatically applied to the winch drum when the winch motor is stopped or there is a load on the cable.
- Planetary Gear System** – The reduction gears convert the winch motor power into extreme pulling forces. This system allows high torque while maintaining compact size and light weight.
- Clamshell Plug & Play Mini Rocker Switch** – Handle bar mounted switch for powering cable in/out of the winch drum. Plugs directly into factory harness.
- Model Specific Winch Mount** – Winch mount designed specifically for select ATVs.
- Contactor** – Power from the vehicle battery flows through the weather sealed solenoid switch before being directed to the winch motor.
- Clevis Hook** – Provides a means for connecting the looped ends of cables to an anchor.
- Cable Hook Stopper** – Protects the rollers, motors, and gears.
- Hand Saver Strap** – Used to assist cable feed.
- Wires** – Model specific pre-installed wiring.

INSTALLATION

This KFI 3,500 lb Plug & Play winch assembly is designed to be a direct fit up to the specific ATV Models from our online application chart.

Prepare the ATV

⚠ WARNING Before you installing the winch, disconnect the vehicle ground and positive battery leads. ETX, 450, and 570 batteries are located lower in the front frame and the 850/1000 are located under the front rack.

1. On the 850 and 1000 Models remove the front rack to gain access to the battery. Disconnect the battery.
2. On the ETX, 450 and 570, open the front rack and remove the center cover [A] by removing the (4) Torx fasteners. You must also lightly pull the rubber seal out of the groove around the center cover as shown in Figure 1.
3. Remove any add-on bumpers or brush guards.
4. Remove the lower cowl [B] on the Sportsman models; the bumper [C] and front assembly clip [D] on the Scramblers as shown in Figures 2 thru 5.
5. Remove and discard the Winch pocket cover [E] shown in Figures 2 thru 5.
6. Remove the winch assembly from the box and cut the zip tie that is holding the power wires for packaging.

Figure 1.

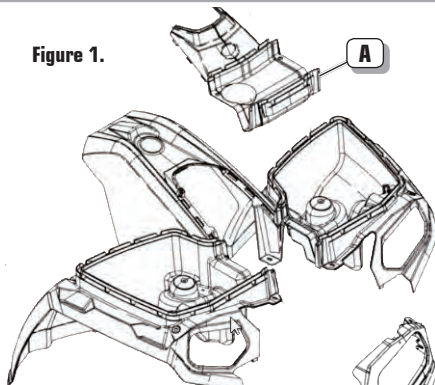


Figure 2. - ETX, 450, 570

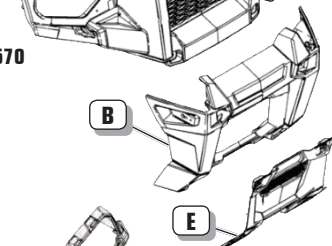


Figure 3. - Scrambler

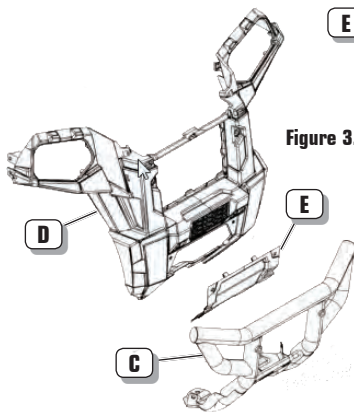


Figure 4. - 850 Sportsman

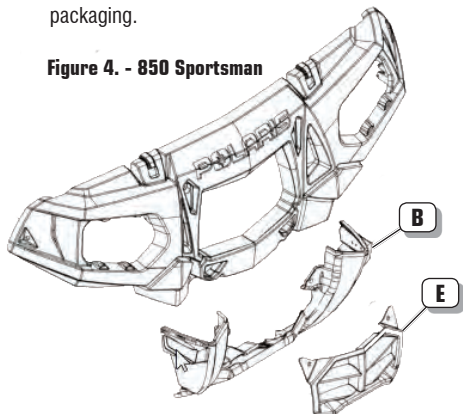
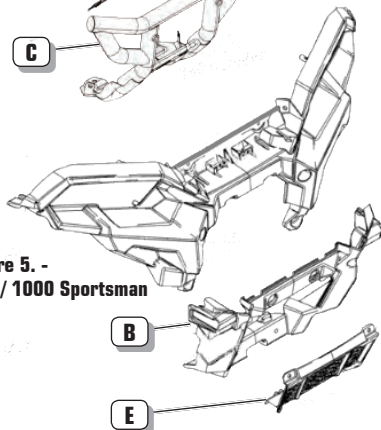


Figure 5. - 850 / 1000 Sportsman



Prepare the Winch Assembly

This Plug and Play Winch comes pre-assembled and ready to install for the 850 and 1000 Polaris ATV's. If you have an 850 or 1000 please skip to the next section. If you have the ETX, 450, or 570 ATV please follow these steps:

7. Remove the (2) self tapping crews [F] holding the contactor [G] down in the back of the assembly as shown in Figure 6.
8. Move the contactor [G] to the new location on the side of the mount, as shown in Figure 7. Make sure the contactor plug [H] is in the orientation shown in Figure 7. To mount the contactor, re-use the self-tapping screws [F].
9. While mounting the contactor to the new location, route the wires going to the winch motor around the motor end as shown in Figures 8 and 9. You should not have to loosen any of the pre-made connections.

Figure 6.

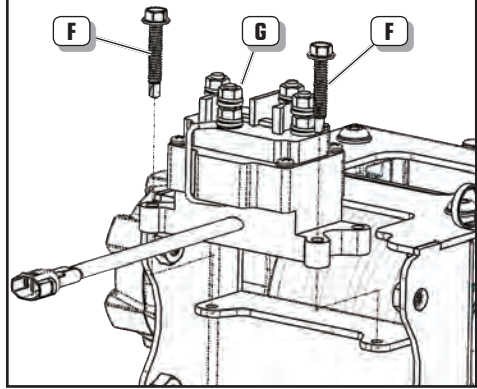


Figure 7.

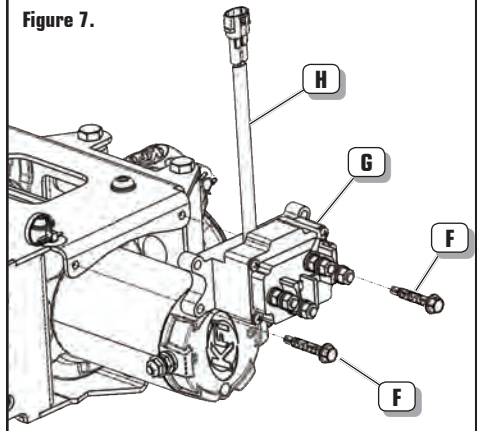


Figure 8.

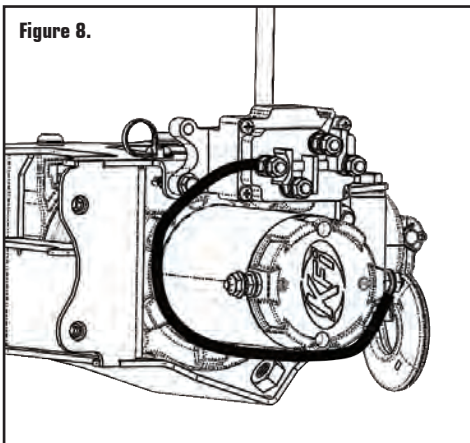
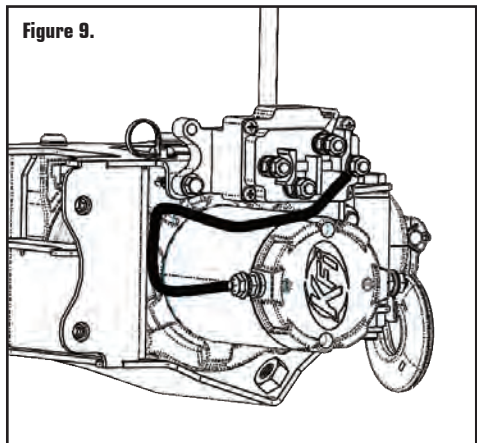


Figure 9.



Install Winch Assembly

⚠ WARNING Failure to follow specific wiring instructions may result in damage to your wiring system or equipment.

- Place winch into frame location while routing winch positive and negative wires to the location under the front rack and install (4) bolts, lock washers and washers loosely as shown in Figures 10 & 11.

⚠ CAUTION Never route electrical wires across any sharp edges, through or near moving parts, or near parts that become hot. Battery wires will be routed on the passenger side of the vehicle, just behind the radiator. Stay clear of the cooling fan and use zip ties to secure wires in place.

⚠ CAUTION Battery cables should not be drawn taut. Leave some slack for cable movement.

- On the 850 and 1000 connect the positive and negative wires directly to the battery terminals.
- On the ETX, 450 and 570 connect the positive and negative wires to the buss bar as shown in Figure 12.
- Tighten down the (4) bolts to secure the winch assembly to the frame.
- Locate the WHITE plug of the OEM pre-wired 2-pin connector, located near the winch assembly on the driver's side (approximate location is shown in Figure 10 [J]). There will be a GREEN and BLACK wire going into the WHITE plug.
Most 2015 and newer ATV's will have this pre-wired plug installed from the factory.
Most 2014 and older models will require the purchase of this additional wire harness. Polaris Part #4015094. Please refer to the application chart for details.
- Cut the zip tie holding the wire to the frame and remove the protective cap.

- Route the wire over to the contactor location on the winch assembly and connect it to the other 2-pin connector [K] that is coming from the contactor shown in Figure 11.
- Secure this wire if needed with zip ties..

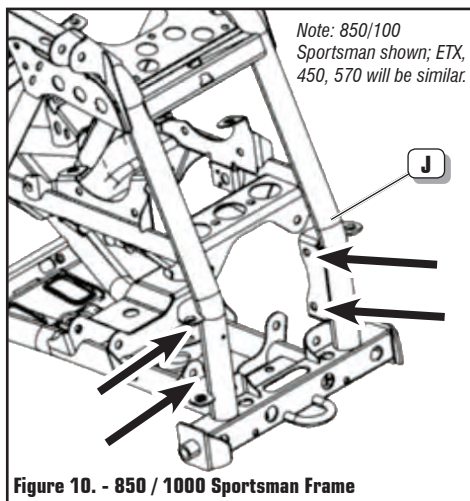


Figure 10. - 850 / 1000 Sportsman Frame

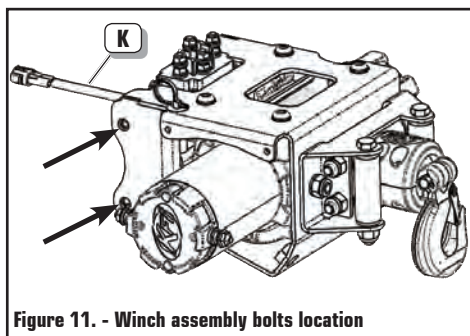


Figure 11. - Winch assembly bolts location

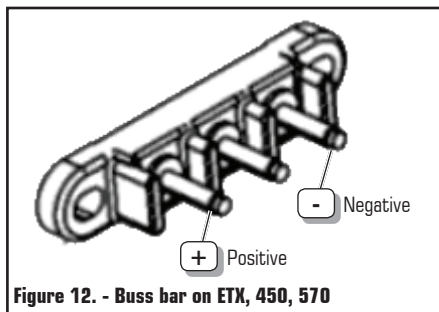
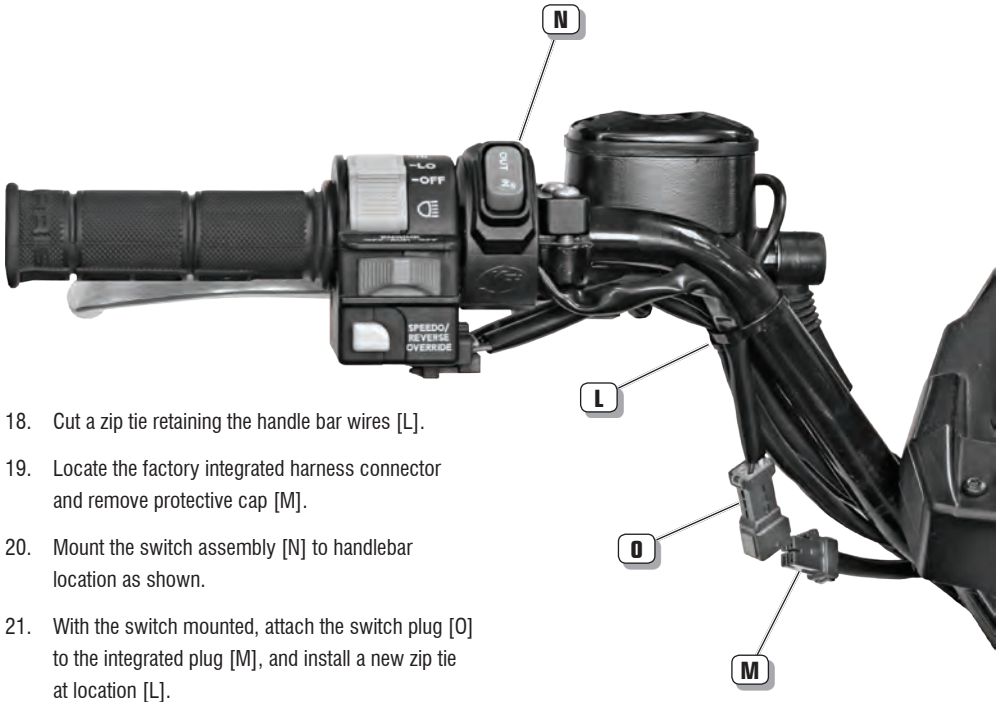


Figure 12. - Buss bar on ETX, 450, 570

Clamshell Mini Rocker Switch Install



18. Cut a zip tie retaining the handle bar wires [L].
19. Locate the factory integrated harness connector and remove protective cap [M].
20. Mount the switch assembly [N] to handlebar location as shown.
21. With the switch mounted, attach the switch plug [O] to the integrated plug [M], and install a new zip tie at location [L].

Completing the Install - Final Steps

22. Turn your ATV ignition on and test the winch operation.
23. On the EXT, 450 and 570 re-assemble the center cover [A] from steps 1 and 2 and close the front rack.
24. On the 850 and 1000 models re-assemble the front rack.
25. On all models, re-install the front lower cover. Re-install the front clip on a Scrambler. And reinstall any aftermarket bumpers removed prior as outlined in steps 3 and 4.

General Tips for Safe Operation

Your ASP-35 winch is rated at 3,500 lbs. capacity in first layer (max) when spooling the first cable layer on the drum. Overloads can damage the winch, motor and/or cable.

The vehicle engine should be kept running during operation of the winch to minimize battery drain and maximize power and speed of the winch. If the winch is used for a considerable time with the engine off the battery may be drained and too weak to restart the engine.

Get to know your winch before you actually need to use it. We recommend that you set up a few test runs to familiarize yourself with rigging techniques, the sounds your winch makes under various loads, the way the cable spools on the drum, etc.

Inspect the cable and equipment before each use. A frayed or damaged cable should be replaced immediately. Use only manufacturer's identical replacement cable with the exact specifications.

Inspect the winch installation and bolts to ensure that all bolts are tight before each operation.

Store the remote control inside your vehicle in a place that it will not be damaged.

Any winch that appears to be damaged in any way, is found to be worn, or operates abnormally **MUST BE REMOVED FROM SERVICE UNTIL REPAIRED**. It is recommended that the necessary repairs be made by a manufacturer's authorized repair facility.

Pull only on areas of the vehicle as specified by the vehicle manufacturer.

Only attachments and/or adapters supplied by the manufacturer are to be used.

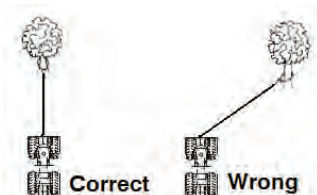
Self Recovery

Locate a suitable anchor such as a strong tree trunk or boulder. Always use a sling as an anchor point.

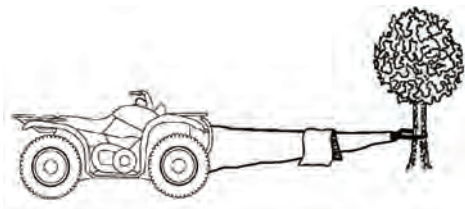


Your winch is equipped with a roller fairlead to help guide the cable and to reduce binding on short side pulls.

Do not winch from an acute angle as the cable will pile up on one side of the drum causing damage to cable and the winch.



Short pulls from an angle can be used to straighten the vehicle. Long pulls should be done with the cable straight out from the winch/vehicle.



When pulling a heavy load, place a cable hook stopper, blanket or jacket over the cable five or six feet from the hook.

In the event of a cable snap it will dampen the snap back. For additional protection open the hood of the vehicle.

Winching Techniques

1. Take time to assess your situation and plan your pull.
2. Put on gloves to protect your hands.
3. Release the clutch and free-spool the winch; it's faster than using the switch and saves battery power.
4. Attach the hook strap to the clevis hook.
5. Pull out the cable to your desired anchor point using the hook strap.
6. Secure the clevis hook to the anchor point: Sling, chain or snatch block. Do not attach the hook back onto the cable.
7. Engage the clutch.
8. Start your engine to ensure power is being replenished to the battery.
9. Power in the cable guiding the cable under tension to draw up the slack in the cable. Once the cable is under tension, stand clear. Never step over the cable.
10. Double check your anchors and make sure all connections are secure.
11. Inspect the cable. Make sure there are at least 5 wraps of cable around the winch drum.
12. Place a Cable Hook Stopper over the cable approximately 5 to 6 feet from the hook.
13. Clear the area. Make sure all spectators stand clear and that no one is directly in front or behind the vehicle or anchor point.
14. Begin winching. Be sure that the cable is winding evenly and tightly around the drum. The vehicle that is being winched can be slowly driven to add assistance to the winching process. Avoid shock loads; keep the cable under tension.
15. The vehicle to be winched should be placed in neutral and the parking brake released. Only release the loads to the winch. This can damage the winch, cable and vehicle.
16. The winch is meant for intermittent use. Under full load with a single line rig do not power in for more than a minute without letting the motor cool down for a few minutes and then resume the winching operation.
17. The winching operation is complete once the vehicle is on stable ground and is able to drive under its own power.
18. Secure the vehicle. Be sure to set the brakes and place the vehicle in park.
19. Release the tension on the cable. The winch is not meant to hold the vehicle for long periods of time.
20. Disconnect the cable from the anchor.
21. Rewind the cable. Make sure that any cable already on the drum has spooled tightly and neatly. If not, draw out the cable and re-spool from the point where the cable is tight.
22. Keep your hands clear of the winch drum and fairlead as the cable is being drawn in.
23. Secure the hook and hook strap.
24. Disconnect the remote control and store in a clean, dry place.
25. Clean and inspect connections and mounting hardware for next winching operation.
26. Never use the winch as a tie down.
27. Use brake pedal when under full tension.

Synthetic Cable Usage

Exercising proper care to prolong the usable life of a Synthetic Cable is your responsibility.

1. **Minimize Cable Abrasion** – Use the supplied protective sheath when the cable comes in contact with trees, rocks, or other sharp abrasive objects. The sheath is design to stay in position while the cable slips through it during use.
2. **Keep the Cable Clean** – Dirt, sand, and debris will cause abrasion. Use the protective sheath to cover the cable on the spool once the cable is in the stowed position.
3. **Avoid Sharp Bends** – If the cable is positioned at a sharp angle, the strength under load will decrease and cable damage or failure may result.
4. **Correct Spool Winding** – When re-spooling cable without a load, it is always better to have someone apply a load to the line while you reel in evenly. Re-spool the cable evenly and tightly on the drum. If cable is wound loosely, it may become wedged under adjacent layers and bind.
5. **DO NOT Grease or Oil** – Do not lubricate synthetic cable with greases or oils. Keep grease and oil away at all times.

Snow Plow Usage

Winches are commonly used to lift a Snow Plow System, but precautions and correct usage are required to prevent costly damage.

NOTICE Follow these precautions before using your Winch to lift a Plow. Failure to do so may result in damage to your winch or vehicle frame.

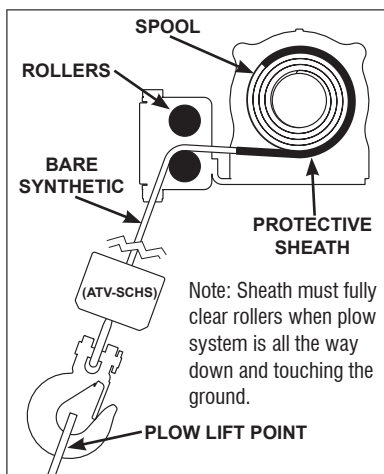
1. Stop the plow before full lift height - failure to do so will cause the winch to pull against itself (i.e. “bottom out”) and will cause damage to the winch components, your plow frame and your vehicle frame.

NOTICE Winch damage such as stripped gears, broken housings and bent or damaged parts caused by exceeding your plow’s lift height are not covered under warranty.

2. Do not continue to hold the Spool In button to power the winch while reversing your vehicle or other instances where the operator may become distracted while plowing.

Protective Sheath

3. Repeated spooling of a short length of cable will increase heat and friction where the rollers contact the synthetic cable. Minimize wear and the possibility of premature failure by **SLIDING THE PROTECTIVE SHEATH BACK UP THE SPOOL**.
4. When the plow system is in the DOWN position, freespool out enough additional cable that you can slide the sheath back up the spool (approx 7-8 ft more). Push the sheath back up thru the optional Cable Hook Stopper and the rollers. Re-spool the winch.
5. Be sure that the sheath completely clears the roller fairlead once spooled tightly onto the winch. The sheath will wrap around several layers on the spool. Reposition the sheath back near the hook when not used for plowing.



MAINTENANCE

The owner/operator is responsible for all periodic maintenance.

Complete all scheduled maintenance in a timely manner. Correct any issue before operating the winch.

WARNING Never operate a damaged or defective winch.

WARNING Improper maintenance will void your warranty.

NOTICE For service or parts assistance, contact our help line at 1-877-346-2050.

Motor

Periodically when not used very often, or after wet / damp conditions. Be sure to run the motor in free spool until the motor is warm. This helps dry out any moisture and condensation trapped inside the housing.

Lubrication

All moving parts within the Electric Winch have been Lubricated using high temperature lithium grease at the factory. No internal lubrication is required under normal conditions.

If the winch is subjected to extreme conditions lubrication may be required using a high temperature lithium grease. Retract Cable Assembly onto drum being careful not to allow kinking or over heating of the winch.

NOTICE Do NOT attempt to lubricate or grease the synthetic cable. Grease and oil will attract dirt and debris which cause abrasion.

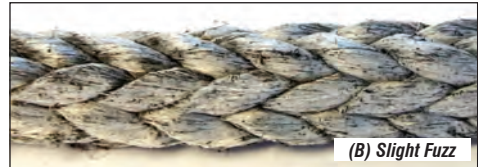
Synthetic Cable Inspection

Periodically, inspect the synthetic cable for wear. When new, it will have a smooth finish (see Figure A).



(A) New Cable

After normal use, the outer surface will appear slightly fuzzy (see Figure B). This is expected and protects the underlying fibers.



(B) Slight Fuzz

Once approximately 25% of the outer fibers show wear (see Figure C), the cable must be replaced.



(C) 25% Frayed

Inspect the inner and outer fibers by compressing the cable (see Figure D).



Look for powdered fiber or abrasion (signs of internal wear). Consider the amount of wear on the internal fibers when determining the percent of wear for replacement.



Glossy or glazed sections (see Figure E) in the cable are usually caused by compression, such as the cable being wound on the drum or through a pulley block. This is considered normal.

NOTICE If you compress (see Figure D) a glazed section of cable (see Figure E) and it remains hardened, then the cable has suffered heat damage and must be replaced.

WARNING Sharp edges and rough surfaces will shorten cable life. Inspect the cable and protective sheath before use. Replace cable immediately if it has cut strands, fused or melted fibers, odd stiff sections, chemical contamination, flat areas, or lumps that cannot be eliminated after flexing the cable.

Cable Assembly Replacement

It is recommended that any modifications be performed by a manufacturer's authorized repair facility, and that only manufacturer-supplied parts be used

1. Rotate the clutch cap to the "Release" position.
2. Extend Cable Assembly to its full length. Note how the existing cable is connected to the inside of the drum.
3. Remove old Cable Assembly and attach new one.
4. Rotate the clutch cap to the "Engage" position.

NOTICE Inspect cable before and after each use. If cable becomes frayed it must be replaced.

SPECIFICATIONS

Performance:

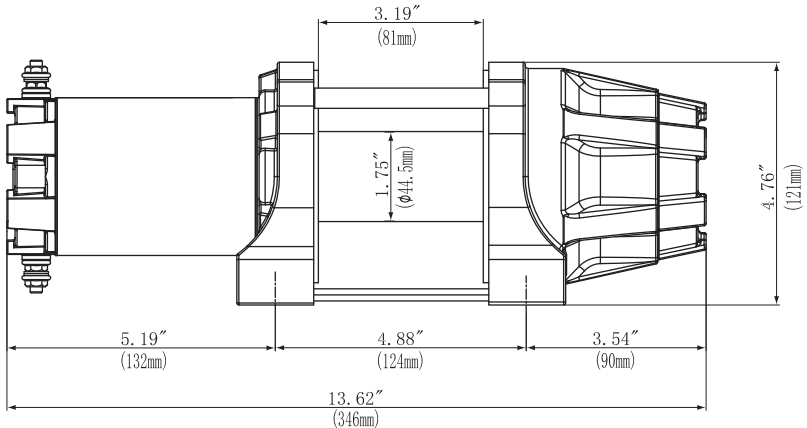
Rated Pull	3,500 lb (1589 kg)	Mounting Bolt Pattern	4.88 in. x 3.00 in. (12.4 cm x 7.6 cm)
Gear Reduction Ratio	180:1	Overall Dimensions	13.62 in. (L) x 4.44 in. (W) x 4.76 in. (H) (34.6 cm x 11.3 cm x 12.1 cm)
Motor.....	Permanent Magnet, 1.15 HP (DC 12V)		
Drum Size.....	1.75 x 3.19 in. (44.5 x 81 mm)		
Cable Dimensions	3/16 in. x 50 ft. (4.8mm x 15.24m)		
Net Weight	26.0 lb. (11.8 kg)		

Line Speed and Motor Current (First Layer)						
Line Pull	LB	0	1000	2000	2500	3500
	KG	0	454	907	1134	1589
Line Speed (12 VDC)	FPM	12.1	10.8	8.2	7.5	4.9
	MPM	3.7	3.3	2.5	2.3	1.5
Max Current	A	28	60	90	115	180
Run Time *	Minutes	1	1	1	1	1
Cooling Time **	Minutes	5	5	5	5	5

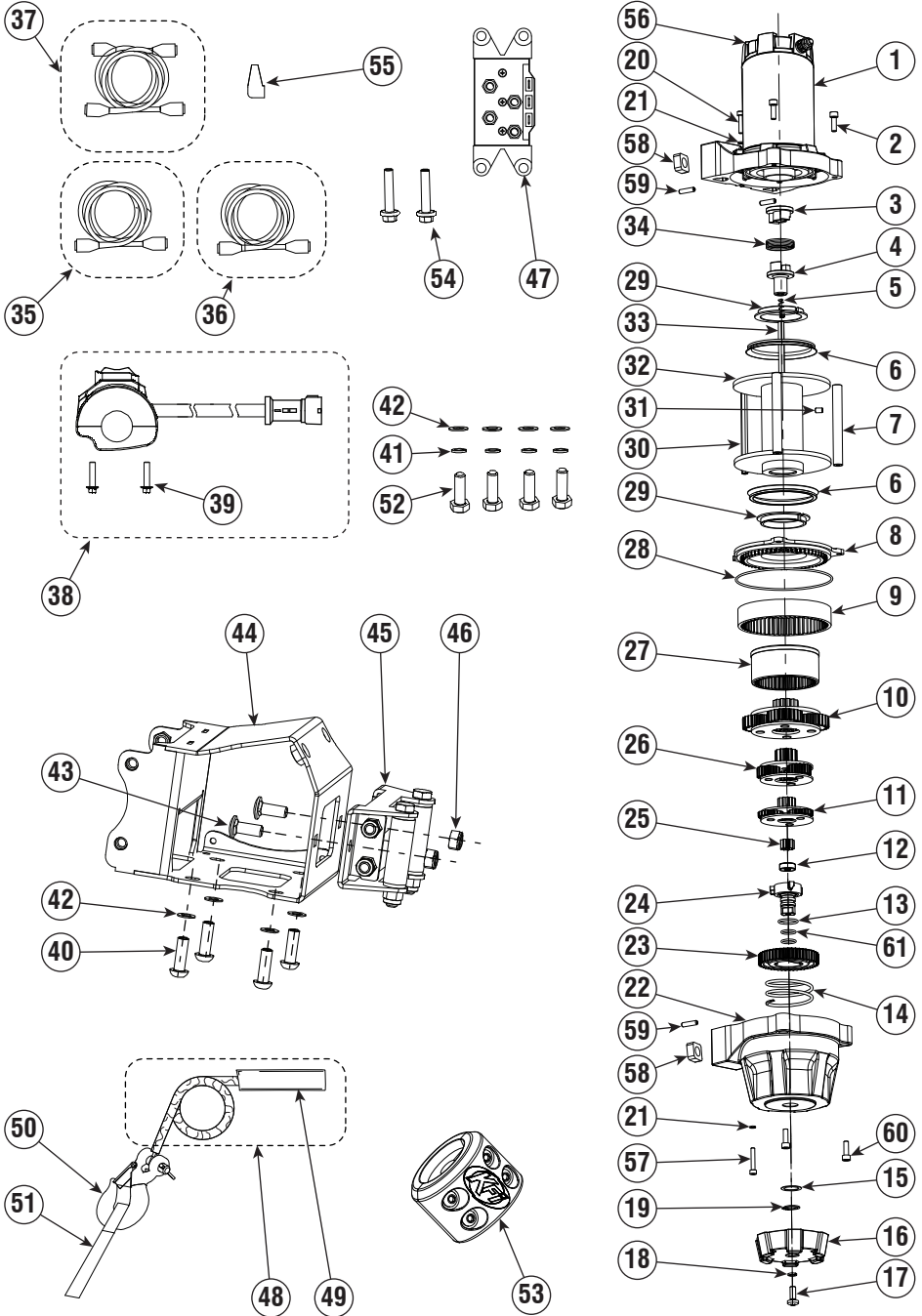
* If the motor becomes uncomfortably hot to the touch, stop winching immediately and let it cool down for 5 minutes. Do not pull for more than one minute at or near the rated load.

** Electric winches are designed and made for intermittent use and should not be used in constant duty applications.

Line Pull and Cable Capacity Per Layer						
Layers of Cable on Drum		1	2	3	4	5
Rated Line Pull	LB	3500	2907	2486	2171	1927
	KG	1589	1320	1128	986	875
Cable Capacity	FT	7.9	17.7	28.9	41.7	50.0
	M	2.4	5.4	8.8	12.7	15.25



Parts Diagram



Parts List

#	Part Number	Description	Qty
1	MOTOR-AS35	Motor Assembly	1
2	HW-0023-B	Screw M5 x 16 Socket	2
3	WP-0026	Coupling, I	1
4	WP-0055	Coupling, II	1
5	WP-0079	Spring, Shaft	1
6	WP-0061	Delf-seal Packing	2
7	WP-0082	Tie Bar Ø10 x 85	2
8	WP-0054	Clutch Cover, Assault	1
9	WP-0068	Gear Ring, I	1
10	WP-0066	Gear Carrier Asm, Output	1
11	WP-0064	Gear Carrier Asm, Input	1
12	WP-0078	Bearing 606 Sealed	1
13	WP-0077	O-Ring Ø19 x 2.4	1
14	WP-0085	Spring, Clutch	1
15	HW-0024	Washer SS Ø16	1
16	WP-0002	Clutch Cap, Assault	1
17	HW-0007-B	Screw M6 x 16 Phillips	1
18	HW-0006	Washer M6 Lock	1
19	HW-0004	Circlip Ø15	1
20	HW-0025-B	Screw M4 x 20 Socket	1
21	HW-0020-B	Washer M4 Lock	2
22	WP-0067	Gear Housing	1
23	WP-0053	Cam, Clutch Gear	1
24	WP-0052	Bushing, Axis Support	1
25	WP-0084	Gear, Input, Sun	1
26	WP-0063	Gear Carrier Asm	1
27	WP-0069	Gear Ring, II	1
28	WP-0075	O-Ring Ø100 x 1.9	1
29	WP-0062	Bushing, Drum	2
30	WP-0074	Hex Tie Bar 6 x 87	1
31	WP-0025	Set Screw M5 x 8	1
32	WP-0059	Drum, Steel, Standard	1
33	WP-0070	Shaft, Hexagon, H6 x 143	1
34	WP-0027	Spring, Coupling	1
35	AP-BAT-WIRE1	Wiring, Battery, Red	1
36	AP-BAT-WIRE2	Wiring, Battery, Black	1
37	AP-WIN-WIRE	Wiring, Winch, Blue/Yellow	2
38	AP-CMR	Switch, Mini-Rocker, Sportsman	1
39	HW-0033	Screw M4 x 16 Cutting	1
40	HW-0027-B	Screw M8 x 25 Button	4
41	HW-0009	Washer M8 Lock	4

#	Part Number	Description	Qty
42	HW-0016	Washer M8	8
43	HW-0028-B	Bolt M10 x 25	2
44	NV-740	Winch Mount, Sportsman	1
45	SE-RF	Roller Fairlead, Stealth	1
46	HW-0012	Nut M10 Nylock	2
47	AP-CONT	Contactora, AP	1
48	SYN19-S50	Cable, Synthetic, 3/16" x 50ft	1
49	ATV-RPS	Protective Sheath	1
50	SE-HOOK	Clevis Hook, 1/4"	1
51	WP-0030-BLK	Hand Saver Strap, Black	1
52	HW-0008	Bolt M8 x 25	4
53	ATV-SCHS	Split Cable Hook Stopper	1
54	HW-0029	Bolt M5 x 25 Self Thread	2
55	WP-0092	Terminal Protector	6
56	AS-CAPKIT	Motor End Cap Assembly	1
57	HW-0019-B	Screw M4 x 25 Socket	1
58	WP-0049	Square Nut	4
59	WP-0050	Pin, Spring, Ø3 x 14	4
60	HW-0026-B	Screw M5 x 18 Socket	2
61	WP-0076	O-Ring Ø13 x 2	2

TROUBLESHOOTING

Problem	Cause	Solution
Motor does not run, Contactor makes a click sound.	Incorrect Wiring	Check Winch Wiring Diagram, make sure all wires are correctly connected.
	Incorrect Wiring	Hand Remote / Mini Rocker Switch wires must be connected green to green and black to black.
	Loose battery cable connections	Hand tighten nuts on all cable connections.
	Motor Issue	Contact KFI Technical Support
	Water has entered motor	Allow to drain and dry. Run in short burst with load until completely dry.
	Brake Spring installed backwards	Contact KFI Technical Support.
Motor does not run, NO click sound from Contactor.	Incorrect Wiring	Check Winch Wiring Diagram, make sure all wires are correctly connected.
	Switch Ignition Wire	Check connection to an ignition fed source. Must supply 12V with the key on and vehicle running.
	Contactor malfunctioning	Contact KFI Technical Support.
	Switch malfunctioning	Contact KFI Technical Support.
Motor runs, Spool turns in one direction only.	Incorrect Wiring	Check wiring diagram, verify switch wires (black/green) are properly connected and making good contact.
	Defective or stuck Contactor	Tap contactor to loosen plungers.
	Defective Switch assembly	Replace Switch assembly.
	Contactor malfunctioning	Contact KFI Technical Support.
Motor runs, Spool does NOT turn.	Clutch not engaged	Rotate Clutch Cap to Engage.
	Broken Coupler / stripped Shaft	Replace Coupler or Shaft
Spool turns, but no movement from Cable	Cable not attached to Spool	Contact KFI Technical Support.
Motor runs slowly or without normal power.	Insufficient current or voltage.	The battery is weak, recharge. Run winch with vehicle motor running (battery should have a strong charge).
	Loose or corroded battery cable connections	Clean, tighten, or replace.
	Worn Brushes	Replace with End-Cap Kit (#AS-CAPKIT) Contact KFI Technical Support.
Motor overheating	Winch running time too long	Allow winch to cool down periodically.

For further support, contact:

KFI Tech Support

Mon-Thr 8:00 AM - 5:00 PM (CST/CDT)

Fri 7:00 AM - 1:00PM (CST/CDT)

Toll Free: 1-877-346-2050

tech@kfiproducts.com

KFI Products Website Support:

Common installation, maintenance, and troubleshooting guides are available on our website.

<https://www.kfiproducts.com/support.html>

WARRANTY

KAPPERS FABRICATING, INC.
2 YEAR LIMITED LIFETIME WARRANTY

Warranty Qualifications

Kappers Fabricating Inc. (KFI) will register this warranty upon receipt of your Warranty Registration Card and a copy of your sales receipt from one of KFI's resale locations as proof of purchase. Please submit your warranty registration and your proof of purchase within Fifteen (15) days of the date of purchase.

Repair/Replacement Warranty

KFI warrants to the original purchaser that mechanical components will be free of defects in material and workmanship for the usable lifetime of the product (180 days for commercial use); and electrical components will be free of defects in material and workmanship for (2) years (180 days for commercial use); from the original date of purchase. Transportation charges on product submitted for repair or replacement under this warranty are the sole responsibility of the purchaser. This warranty only applies to the original purchaser and is not transferable.

Do Not Return The Unit To The Place Of Purchase

Contact KFI's Technical Service and KFI will troubleshoot any issue via phone or e-mail. If the problem is not corrected by this method, KFI will, at its option, authorize evaluation, repair or replacement of the defective part or component at a KFI Service Center. KFI will provide you with a case number for warranty service. Please keep it for future reference. Repairs or replacements without prior authorization, or at an unauthorized repair facility, will not be covered by this warranty.

Warranty Exclusions

This warranty does not cover the following repairs and equipment:

Normal Wear

Winches need periodic parts and service to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.

Installation, Use and Maintenance

This warranty will not apply to parts and/or labor if this winch is deemed to have been misused, neglected, involved in an accident, abused, loaded beyond the winch's limits, modified, installed improperly or wired incorrectly to any electrical component. Normal maintenance is not covered by this warranty.

Other Exclusions

- The winch cable or synthetic cable.
- Cosmetic defects such as paint, decals, etc.
- Accessory parts such as storage covers.
- Misuse, abuse, neglect, acts of God, terrorism and causes beyond the control of KFI.
- Problems caused by parts that are not original Kappers Fabricating Inc. parts.
- Cable Stacking and Water Submersion or Damage Caused by Water.

Warranty Procedure

1. Contact KFI Technical support to acquire a Return Authorization (RA) number.
2. KFI may request additional materials (such as original sales receipt, date of purchase, technical details, or photos of Product condition) prior to issuing an RA number.
3. At the discretion of KFI, Buyer shall mail, ship, or otherwise deliver to KFI the Warrantied Product, at the address noted below.

Limits of Implied Warranty and Consequential Damage

Kappers Fabricating Inc. disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this winch. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

A unit provided as an exchange will be subject to the warranty of the original unit. The length of the warranty governing the exchanged unit will remain calculated by reference to the purchase date of the original unit.

This warranty gives you certain legal rights which may change from state to state. Your state may also have other rights you may be entitled to that are not listed within this warranty.

Contact Information

Address

KFI Products
Winch Customer Service
P.O. BOX 32
721 SATA DRIVE
SPRING VALLEY, MN 55975

Corporate

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Fax No: 1-507-346-2010
E-mail: sales@kfiproducs.com

Technical Service

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Thr - 7:00 AM - 1:00 PM (CST/CDT)
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