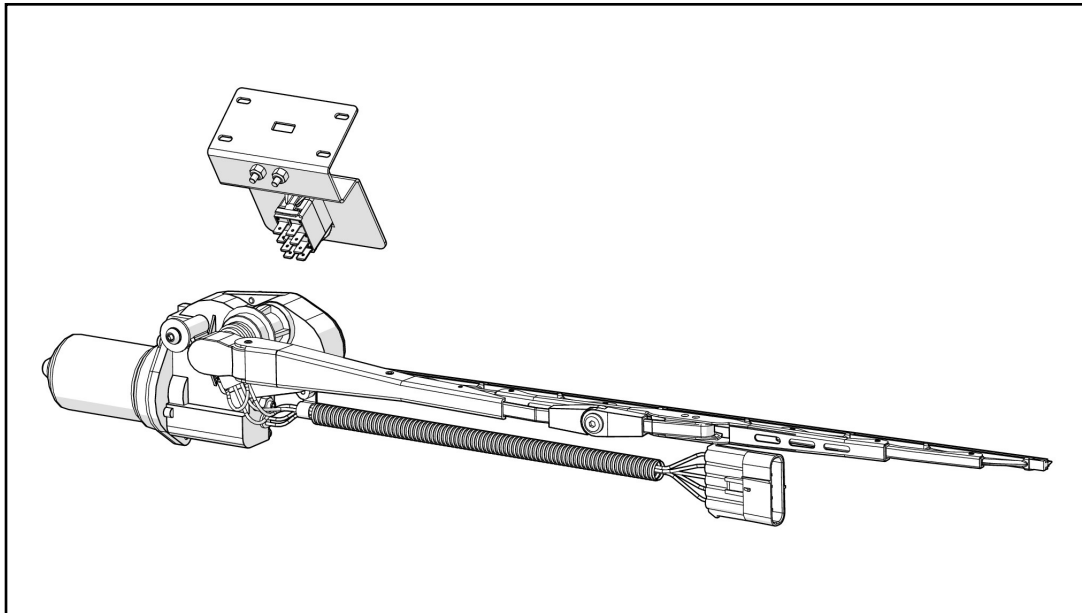




INSTALLATION & OWNER'S MANUAL

Polaris Ranger 1000 Wiper Kit p/n:1POLXP1000WK Fits UTV Models: POLARIS RANGER 1000 & XP 1000



Available Options:

1. Door Kit (P/N: 1POLXP1000DR)
2. Roof Kit (P/N: 1POLXP1000RF)
3. Rear Panel Kit (P/N: 1POLXP1000RP)
4. Windshield Kit (P/N 1POLXP1000WS)
5. Side View Mirrors (P/N: 9PM5)
6. Door Restraint Kit (P/N: 1POLXP1000GS)

Approximate Installation Time *

Experienced Dealer Technician – 30 minutes
Average Dealer Technician – 45 minutes
Do-It-Yourself – 60 minutes

(*=Not including accessories)

Approximate Product Specifications

Weight: 6.5 lbs.

Register your new product quickly online at
Curtiscab.com/product-registration/



Curtis encourages all customers to register their Curtis products. However, failure to do so will not diminish right to warranty. Curtis Industries does not sell or share your information with anyone else.

Download a digital copy of your installation instructions online at Curtiscab.com/literature/



Curtis strives to continuously improve our products, technical documentation, etc. Therefore, the installation manual for this product may have been updated after your product was packaged. The latest revision of the installation manual can always be found at the website above.

The contents of this envelope are the property of the owner. Leave with the owner when installation is complete.

Rev. B, 12/28/2022

p/n: IM-1POLXP1000WK

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WARNINGS, TIPS, & REQUIRED TOOLS

Curtis cabs, kits, and accessories feature an assembly of parts designed for your vehicle which require adjustment and alignment of components to accommodate vehicle variations and provide proper weather protection. For accurate installation, proper operation, and years of satisfaction, please read and understand the installation and owner's manual fully prior to installing the wiper kit.

From all of us at Curtis, we thank you for choosing our product.

NOTICE

Curtis Cabs, blades and general accessories add additional weight to the base vehicle. All Curtis accessory weights are listed in product brochures. Deduct the accessory's total weight from the vehicle's rated capacity and never exceed the vehicle's rated capacity including driver and passenger.

WARNING

Exposure to Carbon Monoxide can Cause illness, serious injury or death. Never operate vehicle if suspicious of Carbon Monoxide. Inspect exhaust system for leaks monthly. Leaks can result from loose connections, corrosion, cracks or other damage to the exhaust manifold. If leaks are found, repair or replace exhaust system. Do not use vehicle until repair or replacement is complete.

WARNING

Serious Injury or Death

	This cab enclosure does not provide protection from rollover or other accidents.
	This cab enclosure does not provide protection from flying objects including golf balls.
	This cab enclosure does not provide protection from lightning. When lightning threatens take cover and do not operate vehicle.

California Health and Safety Proposition 65 Warning: This product may contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

GENERAL INFORMATION BEFORE YOU START

HELPFUL HINTS:

- Refer to parts diagram found in the service parts section of this manual to help identify parts during the assembly process.
- Read and understand all instructions before beginning.

TOOLS REQUIRED:

- | | |
|---|--|
| <ul style="list-style-type: none"> •Set of Standard and Metric Sockets (3/8" Drive) •3/8" Drive Ratchet and Long Drive Extension •Set of Standard and Metric Open End Wrenches •Set of Standard and Metric Allen Wrenches •Electrical and Masking Tape | <ul style="list-style-type: none"> •Drill/Driver •1/16" Drill & Step Drills for 5/16" and 3/4" holes •#2 Phillips and small flathead screwdrivers •Diagonal Cutters •Pair of Scissors |
|---|--|

KIT INSTALLATION

STEP 1: (KIT INSTALLATION)

Start installation of this Wiper Kit before installing the Windshield Kit onto the Vehicle. If installing multiple Curtis Polaris Ranger 1000 kits, install in the following order.

- 1.Doors
- 2.Windshield
- 3.Rear Panel
- 4.Roof

1.1 Per figure 1.1, remove front hood for Vehicle and set aside.

1.2 Per figure 1.2, remove the (2) plastic rivets as shown. Slide Dash Center Tray off and set aside both the tray and rivets.

Tools required

Small Flathead Screwdriver

1.3 Per figure 1.3, slide the push-on terminal side of the provided Wiper Power Harness (one with fuse) through the vehicle's split grommet.

1.4 Per figure 1.4, continue to slide the remainder of the harness through the grommet leaving around 16-17 inches of the harness exposed.

1.5 Next, go inside the vehicle and push the harness with the push-on terminals towards the left ROPS underneath the left side of the dash. See figure 1.5. Note: should be able to reach the dash exit point from the area where the dash center tray was removed.



Fig. 1.1 (Remove Hood)

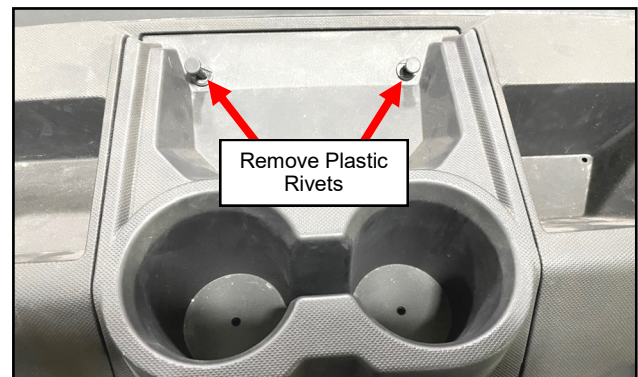


Fig. 1.2 (Remove Dash Center Tray)

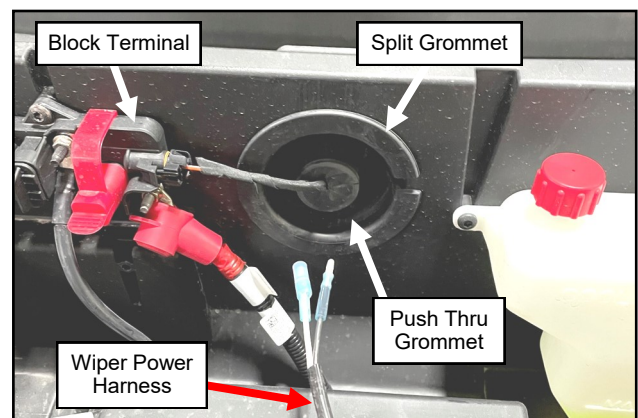


Fig. 1.3 (Install Wiper Power Harness)

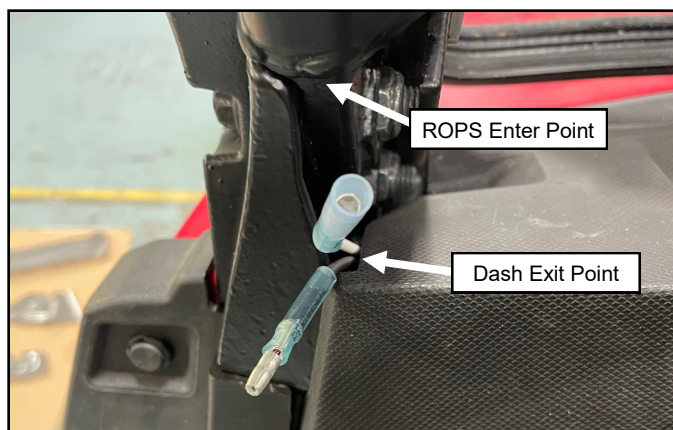


Fig. 1.5 (Install Wiper Power Harness, Under Dashboard)

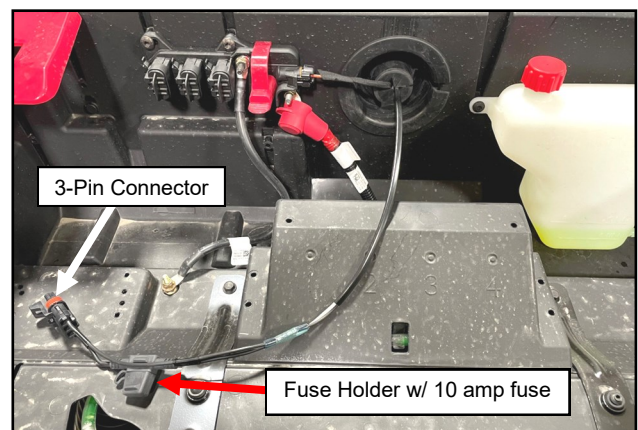


Fig. 1.4 (Install Wiper Power Harness, Under Hood)

KIT INSTALLATION

STEP 1: (KIT INSTALLATION CONT'D)

1.6 Continue to route Wiper Power Harness by pushing the push-on terminals end from left ROPS entrance point (see figure 1.5) up to the ROPS exit hole at the top per figure 1.6.

1.7 Next, drill the (2) holes for mounting the wiper motor to the top of the windshield. Using the provided drill template found on the next page (Note: check to see if the template is printed properly before drilling the windshield), see figure 1.7b for placement. First center punch the two holes, drill using a small 1/16" drill bit and then use step drill bits designed to drill holes in plastic (see figure 1.7a).

Tools required

Center Punch

Drill

Step drill bit(s) for 5/16 and 3/4 inch holes

Pair of Scissors

Masking Tape

1.8 Next, fully install windshield kit onto vehicle. Once complete, continue onto step 1.9.

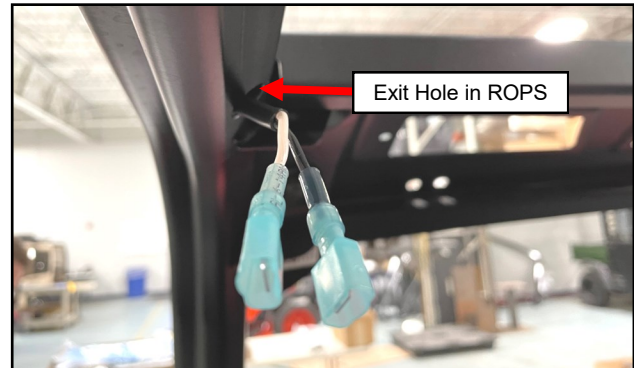


Fig. 1.6 (Install Wiper Power Harness, Left ROPS)



Fig. 1.7a (Recommended Step Drills)

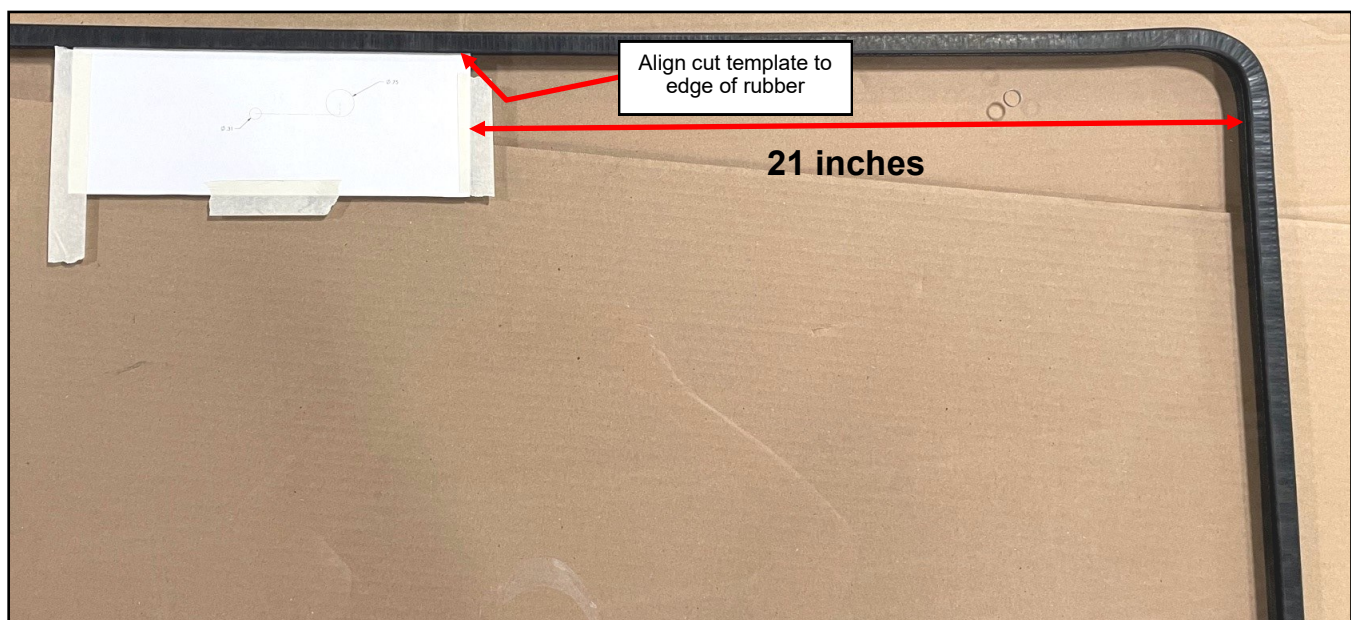


Fig. 1.7b (Tape Drill Template on Front Side of Windshield)

CUT HERE & ALIGN TO RUBBER

$\varnothing 0.313$

$\varnothing 0.750$

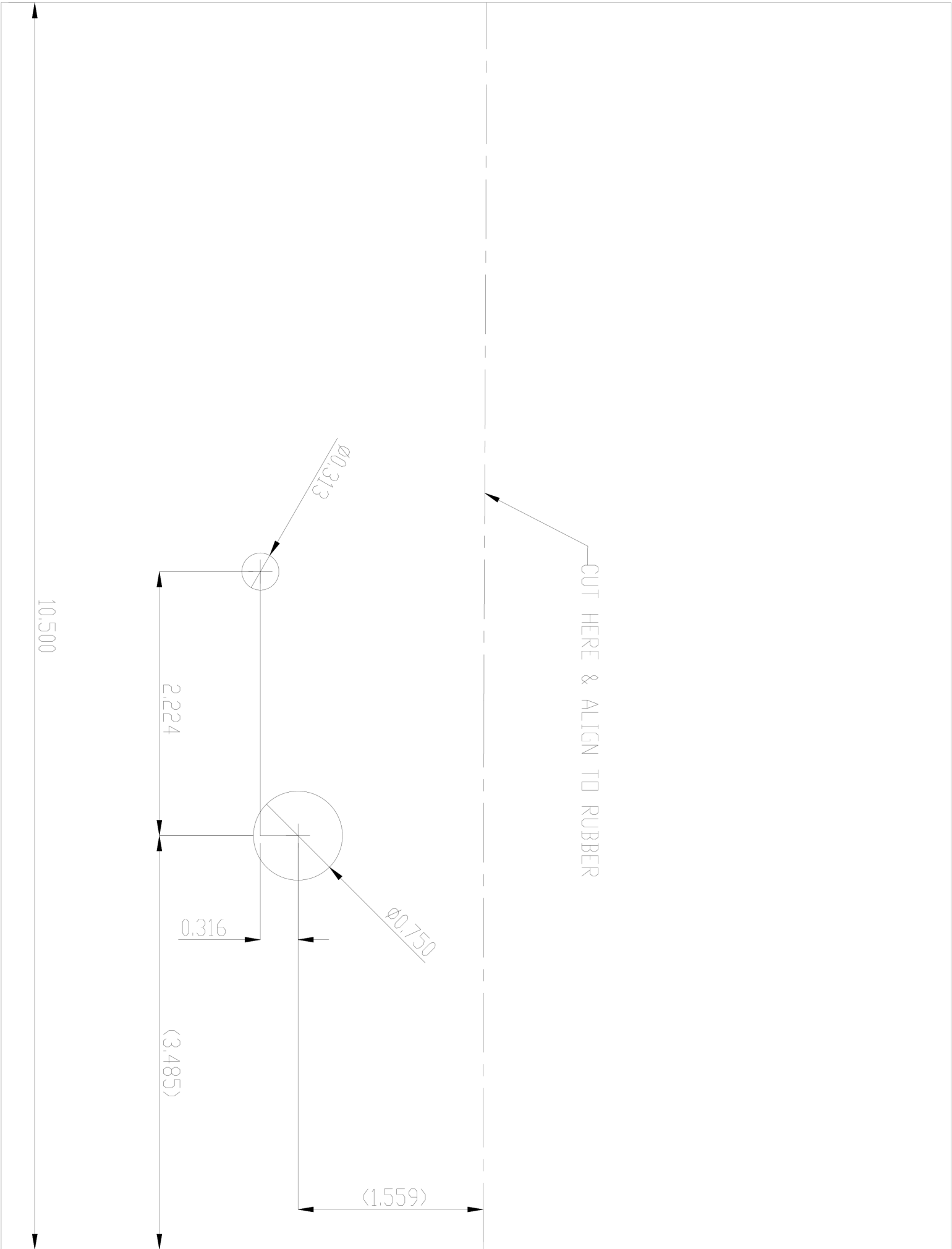
(1.559)

(3.485)

0.316

2.224

10.500



KIT INSTALLATION

STEP 1: (KIT INSTALLATION CONT'D)

- 1.9 Per figure 1.9, install wiper motor to the top center part of the installed windshield using much of the hardware provided in the wiper hardware mounting kit.

Tools required

4mm Allen wrench
24mm open-end wrench

- 1.10 Per figure 1.10, connect the (2) 5-pin connectors found on the wiper motor and Wire Harness w/o Relay. Zip-tie the connectors to the top of the Rocker Switch bracket.

Hardware Used

8" Zip-ties

Qty

2

Tools required

Diagonal Cutters

- 1.11 Per figure 1.11, install rocker switch into the rocker switch bracket (making sure light bulb is at the bottom), install the switch cover (with symbol at the bottom) and connect the 8-pin VCH connector (found on the Wire Harness w/o Relay) to the back of the rocker switch. Next, bolt-on Rocker Switch Bracket to the center tab found on the windshield mount with provided hardware. Route the cables as shown. Use zip-ties to secure the harness in place. Run the (2) wire end (4ft long) part of the Wire Harness w/o Relay to the back edge of the windshield mount and use the (2 of the 3) provided holes to zip-tie the harness in place.

Hardware Used

#8-32 X 1/2" Pan Head Screw
#8-32 Lock Hex Nut
4" Zip-ties

Qty

2

2

3

Tools required

#2 Phillips Screw Driver
11/32" open-end wrench
Diagonal Cutters

- 1.12 Per figures 1.12a & b, connect the two black wires and then the white to red wires. Cover the push-on terminals and wires using the provided 1/2" loom (taping loom in place) and zip-tying loom to windshield mount. Next, remove the center (3) pin connector on the vehicle buss bar and connect the Wiper Power Harness to the buss bar.

Hardware Used

4" Zip-ties

Qty

1

Tools required

Pair of Scissors
Electrical Tape
Diagonal Cutters

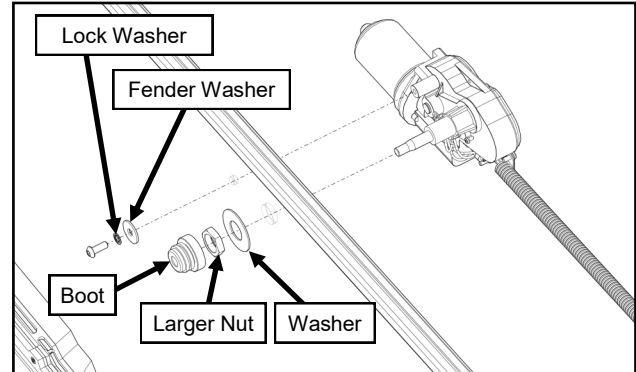


Fig. 1.9 (Install Wiper Motor onto Installed Windshield)

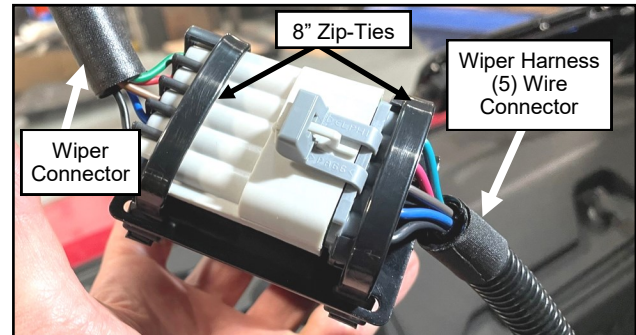


Fig. 1.10 (Zip-Tie 5-pin Connectors to Top of Bracket)

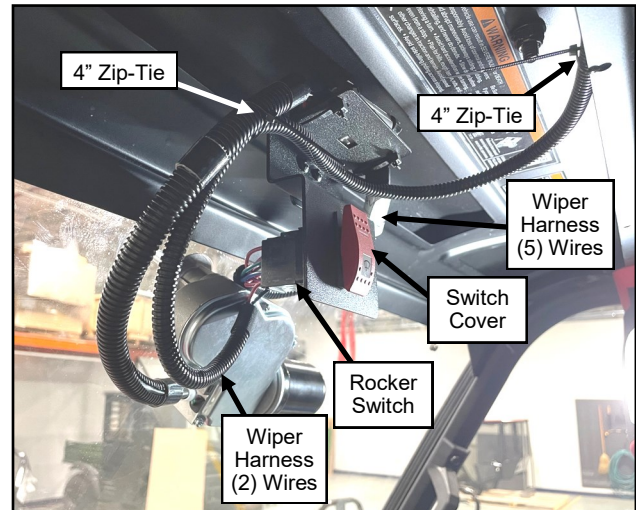


Fig. 1.11 (Install Rocker Switch to Vehicle)

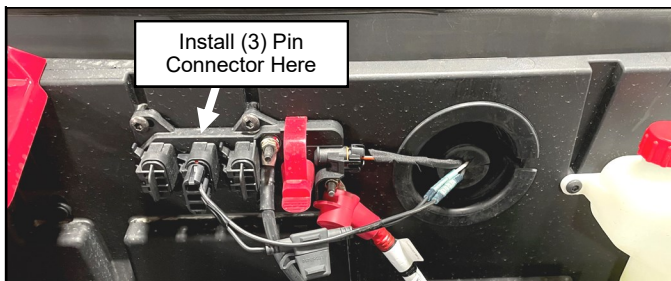


Fig. 1.12b (Connect (3) pin connector to buss bar)

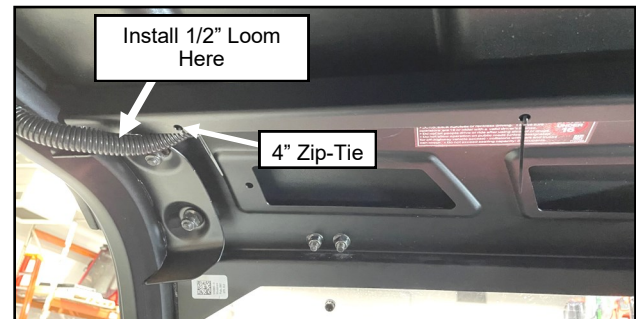


Fig. 1.12a (Connect Push-On Terminals, Left ROPS)

KIT INSTALLATION

STEP 1: (KIT INSTALLATION CONT'D)

1.13 Power on wiper motor and then turn back off. This will make sure that the wiper motor is in its parked (home) position.

1.14 Per figure 1.14, install wiper blade to wiper arm.

1.15 Per figures 1.15a, b & c, install wiper arm onto the wiper motor with the remaining hardware found in the wiper hardware mounting kit. Make sure that the wiper blade is placed horizontal on the left side of the windshield as shown in figure 1.15b. Adjust wiper arm length as needed. To adjust the wiper arm's length, pry open the catch found on the wiper arm, adjust arm length and close the catch back up.

Tools required

1/2" socket or open-end wrench

1.16 Per figure 1.16, install cover of the mounting end of the wiper arm.

1.17 Re-install hood and dash center tray removed in steps 1.1 and 1.2. The kit is now fully installed.

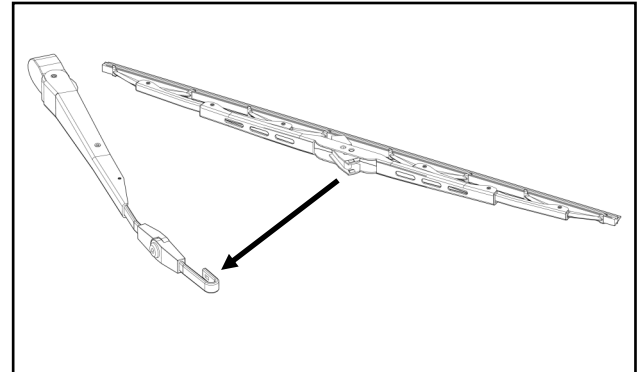


Fig. 1.14 (Install Wiper Blade onto Wiper Arm)

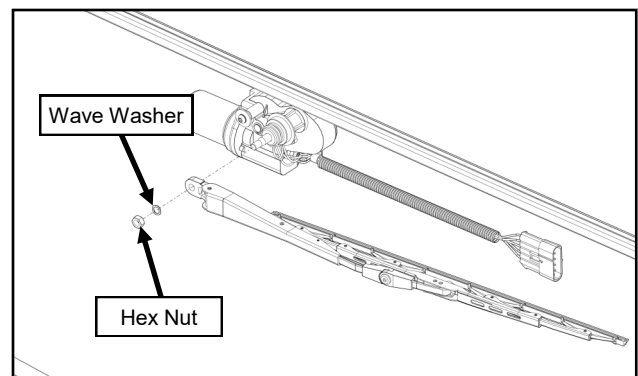


Fig. 1.15a (Install Wiper Arm onto Wiper Motor)

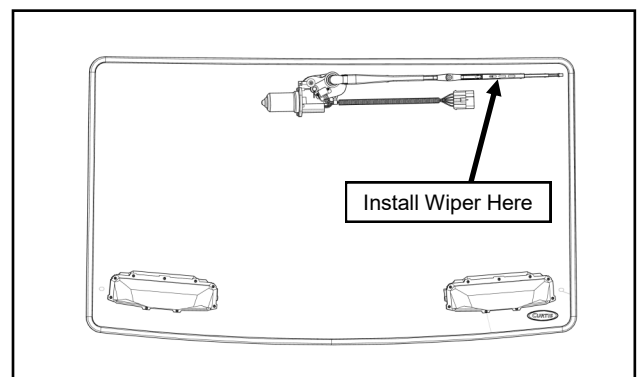


Fig. 1.15b (Install Wiper Arm, Left Side)

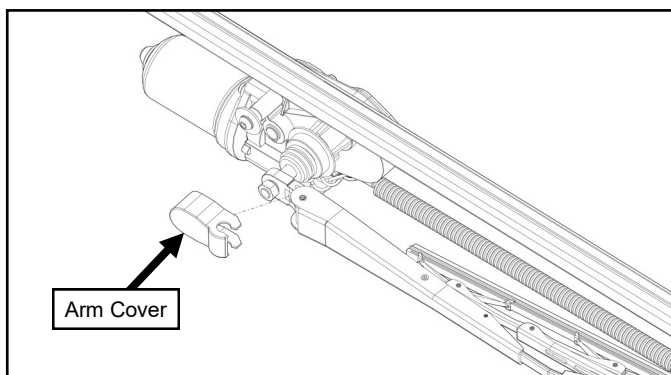


Fig. 1.16 (Install Wiper Arm Cover)

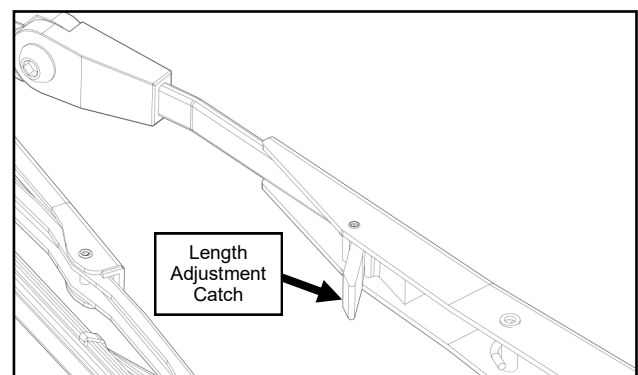
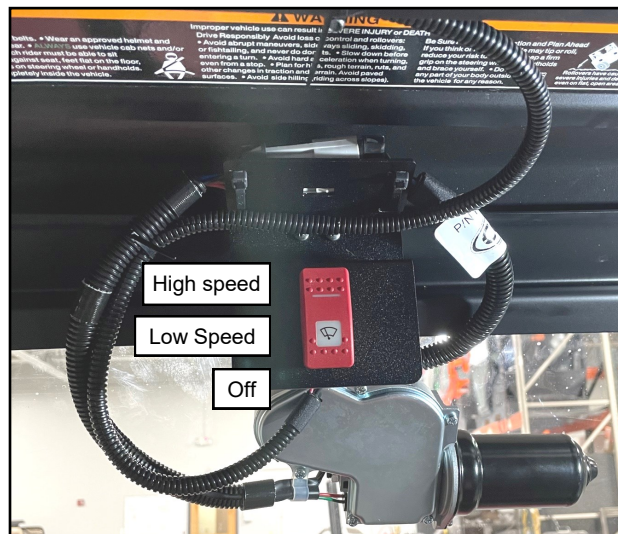


Fig. 1.15c (Adjust Wiper Arm Length as Needed)

KIT FEATURES & OPERATION

2-speed adjustment wiper motor

This wiper kit has a 3-position rocker switch. This provides an off mode and low and high wiper speeds.



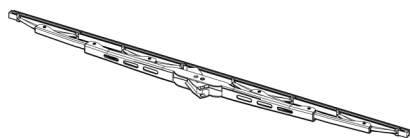
Windshield Wiper Rocker Switch

CARE AND MAINTENANCE

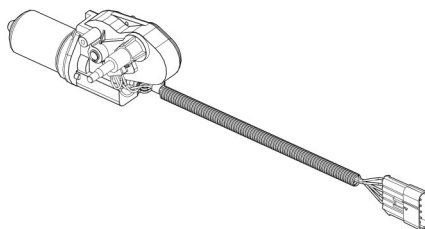
- Check and tighten hardware after 40 hours of operation. Periodically inspect and tighten hardware for the remainder of the unit's life.

POLARIS RANGER 1000 WIPER KIT SERVICE PARTS

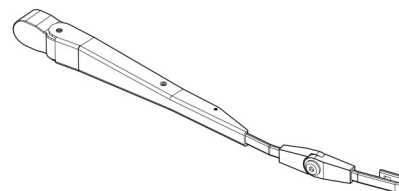
WIPER BLADE, 20" FLEX BLADE, J-HOOK
P/N: 9SV-9PWB20FBH



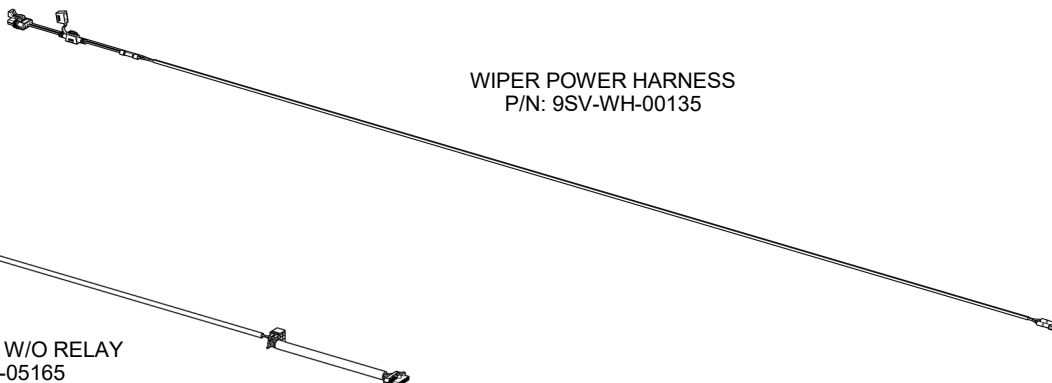
172 DEGREE WIPER MOTOR
P/N: 77700-05160



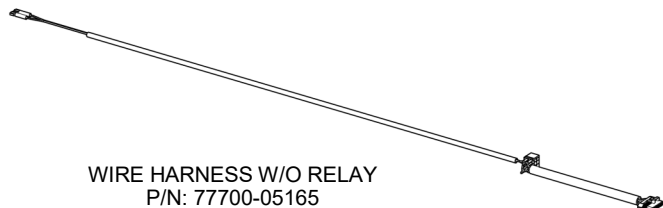
WIPER ARM, DIN HEAD DRY, J-HOOK,
ADJ. LENGTH (14"-18"); P/N: 77700-05161



WIPER POWER HARNESS
P/N: 9SV-WH-00135



WIRE HARNESS W/O RELAY
P/N: 77700-05165










Torque Specs. for Structural Bolts

This page is for use primarily when dealing with high-strength vehicle fasteners such as ROPS hardware that hold the structure together for safety. This page can also be used for other solid metal-to-metal joints. **Do not** use these high torque values on any of the following applications involving: tubing, plastic, nylon or rubber washers, threaded inserts, etc.. See next page regarding less critical fasteners.

The values below apply to fasteners that are dry or lubricated with normal engine oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

Remember to always use the same grade or property class when replacing bolts.

IMPORTANT: on all PLATED GRADE 8 bolts, reduce torque 15% from listed bolt torque specification.

SAE Grade No.		2				5				8*			
Bolt head identification mark as per grade. NOTE: Manufacturing Marks Will Vary						  				  			
Bolt Size		TORQUE				TORQUE				TORQUE			
Inches	Millimeters	Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters		Pounds Feet		Newton-Meters	
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4	6.35	5	6	7	8	9	11	12	15	12	15	16	20
5/16	7.94	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	9.53	20	23	27	31	35	42	48	57	45	54	61	73
7/16	11.11	30	35	41	47	54	64	73	87	70	84	95	114
1/2	12.70	45	52	61	70	80	96	109	130	110	132	149	179
9/16	14.29	65	75	88	102	110	132	149	179	160	192	217	260
5/8	15.88	95	105	129	142	150	180	203	244	220	264	298	358
3/4	19.05	150	185	203	251	270	324	366	439	380	456	515	618
7/8	22.23	160	200	217	271	400	480	542	651	600	720	814	976
1	25.40	250	300	339	406	580	696	787	944	900	1080	1220	1464
1-1/8	25.58	-	-	-	-	800	880	1085	1193	1280	1440	1736	1953
1-1/4	31.75	-	-	-	-	1120	1240	1519	1681	1820	2000	2468	2712
1-3/8	34.93	-	-	-	-	1460	1680	1980	2278	2380	2720	3227	3688
1-1/2	38.10	-	-	-	-	1940	2200	2631	2983	3160	3560	4285	4827

*Thick Nuts must be used with Grade 8 bolts

METRIC BOLT TORQUE SPECIFICATIONS



Size of Screw	Property Class	Course Thread			Fine Thread		
		Pitch (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	5.6	1.0	3.6-5.8	4.9-7.9	-	-	-
	8.8		5.8-9.4	7.9-12.7		-	-
	10.9		7.2-10	9.8-13.6		-	-
M8	5.6	1.25	7.2-14	9.8-19	1.0	12-17	16.3-23
	8.8		17-22	23-29.8		19-27	25.7-36.6
	10.9		20-26	27.1-35.2		22-31	29.8-42
M10	5.6	1.5	20-25	27.1-33.9	1.25	20-29	27.1-39.3
	8.8		34-40	46.1-54.2		35-47	47.4-63.7
	10.9		38-46	51.5-62.3		40-52	54.2-70.5
M12	5.6	1.75	28-34	37.9-46.1	1.25	31-41	42-55.6
	8.8		51-59	69.1-79.9		55-68	75.9-92.1
	10.9		57-66	77.2-89.4		62-75	84-101.6
M14	5.6	2.0	49-56	66.4-75.9	1.5	52-64	70.5-86.7
	8.8		81-93	109.8-126		90-106	122-143.6
	10.9		96-109	130.1-147.7		107-124	145-168
M16	5.6	2.0	67-77	90.8-104.3	1.5	69-83	93.6-112.5
	8.8		116-130	157.2-176.2		120-138	162.6-187
	10.9		129-145	174.8-196.5		140-158	189.7-214.1
M18	5.6	2.0	88-100	119.2-136	1.5	100-117	136-158.5
	8.8		150-168	203.3-227.6		177-199	239.8-269.6
	10.9		175-194	237.1-262.9		202-231	273.7-313
M20	5.6	2.5	108-130	146.3-176.2	1.5	132-150	178.9-203.3
	8.8		186-205	252-277.8		206-242	279.1-327.9
	10.9		213-249	288.6-337.4		246-289	333.3-391.6

Tightening of Non-Structural Bolts

For light or medium duty fastening, Curtis recommends using a general industry standard of tightening until snug and then giving an additional one quarter turn of the tool as deemed reasonable for the application (i.e.: at the installer's discretion).

If torque values are required, the examples listed below are intended as a reasonable reference for use in the majority of non-structural fastener applications such as: small diameter fasteners; bolts passing thru tubing, glass, plastic, nylon or rubber washers, threaded inserts, etc.

If more than one application below applies, use the lower torque value.

FASTENER SIZE:	FASTENER TYPE:	WASHER MATERIAL:	APPLICATION:	TORQUE (INCH-POUNDS) (±5)
#10	Machine Screws	-	in Nylon P-Clamps	20
#10	Machine Screws	-	Strobe Light (plastic base)	35
M5	Set Screws	-	Wiper Arm	20
1/4"	Cap Nut	-	Windshield Wiper	20
1/4"	Bolts	-	Tubing (5/8" to 3/4" wide)	132
1/4"	Bolts	Rubber	-	60
1/4"	Bolts	Nylon / Plastic	-	72
1/4"	Bolts	-	Factory Installed Threaded Inserts	132
5/16"	Bolts	-	Tubing (1" or wider)	60
5/16"	Flat Head Bolts	-	Plastic Windshield Hinge	79
5/16"	Bolts	Rubber	-	120
5/16"	Bolts	Nylon / Plastic	-	150
5/16"	Ball Studs	-	-	150
5/16"	Bolts	-	Factory Installed Threaded Inserts	240
3/8"	Bolts	-	Tubing	120
M12	Door Striker Pins	-	-	120