

NOTE: MAKE SURE YOU READ AND UNDERSTAND ALL INSTRUCTIONS PRIOR TO STARTING. THIS IS A COMPLEX INSTALL AND SHOULD ONLY BE PERFORMED BY AN EXPERIECNED PERSON.

- 1. REMOVE ALL MOULDING FROM THE DOR FRAME AREAS, REAR VIEW MIRROR, VISORS, SEATS, PLASTIC PANELS, AND HEADLINER. REMOVE UPPER SEAT BELT ATTACHMENT ON PILLAR. CUT SHOULDER HARNESS BRACKETS FROM SHOULDER STRAPS. HARNESS IS NO LONGER USED, YOU MUST USE LAP BELT.
- 2. INSTALL OPTIONAL (AND RECOMMENDED) CAB REINFORCEMENT KIT. A. SLIDE CAB STIFFENER DOWN BEHIND DOOR PILLARS, DRILL HOLES IN MOUNTING PLATE AND ATTACH WITH HARDWARE PROVIDED. B. DRILL 1/16" HOLES THROUGH REAR CAB WALL WITH SHEET METAL SCREWS THROUGH LARGER HOLES.
- 3. DETACH HEADLINER AT WINDSHIELD AND LET HANG LOOSE PAST CUT LINE. NOTE: COMPASS MEASUREMENTS ARE MADE FROM FRONT EDGE OF WINDSHIELD MOULDING WHERE GLASS MEETS MOULDING (SEE ILLUSTRATION 3).
- 4. FRONT ROOF LINE COMPASS MARKING:
- A. SET COMPASS AND SCRIBE YOUR LINE STARTING AT CORNER WINDSHIELD WHERE MOULDING CURVES AWAY.
- B. SCRIBE A 2ND LINE 3/8" BEHIND FIRST LINE. THIS REPRESENTS APPROXIMATE AMOUNT OF MATERIAL TO BE REMOVED FROM ROOF.

 5. MAKE SURE TRUCK IN PARKED ON LEVEL GROUND. REMOVE ANY SIDE PILLAR TRIM. WITH DOOR CLOSED, MEASURE REAR DOOR CUT LINE. MAINTAIN THIS SAME HEIGHT FOR YOU REAR CAB WALL CUT. MAKE SURE THAT PLACEMENT IS CONSISTANT FROM ONE SIDE TO OTHER. USING CHALK LINE OR STRAIGHT EDGE, MARK LINE ACROSS REAR CAB WALL BETWEEN MARKS. AFTER LINE IS MARKED, USE LEVEL TO DOUBLE CHECK LINE IS LEVEL IN RELATION TO BACK WIINDOW AND TRUCK BED TOP EDGE.

 6. TRANSFER LINE TO INSIDE OF CAB BY DRILLING TWO 1/8" HOLES ON LINE YOU JUST DREW. MARK A LINE ON INSIDE OF CAB WALL BY LINING UP BTH HOLES. THIS IS REAR CUT LINE. MARK WITH DUCT TAPE ON EACH SIDE OF LINE LEAVING A 3/8" LINE REPRESENTING AMOUNT OF METAL TO BE REMOVED. MARKING REAR PILLAR POST CUT LINES INSIDE AND OUT OF CAB
- REMOVED. MARKING REAR PILLAR POST CUT LINES INSIDE AND OUT OF CAB IS TRICKY, MAKE SURE THEY ARE LEVEL AND EVEN. GET SECOND OPINION.

 7. IT IS RECOMMENDED THAT YOU REMOVE YOUR REAR GLASS TO KEEP IT FROM PITTING OR BREAKING. BE SURE TO TAPE AND MASK REAR WINDOW FOR SAFETY. ALSO, USE SOME SORT OF COVER TO PROTECT THE BED'S PAINT. MAKE AN ELONGATED HOLE ON REAR CUT LINE WITH DIE GRINDER FOR AN ENTRY POINT. USE A STRAIGHT BAR OR EDGE TO SERVE AS CUTTING "FENCE" FOR AIR SHEARS TO INSURE A STRAIGHT LINE. CUT ALL PLACES YOU CAN REACH ON THAT LINE. GET HELP ON MARKING AND CUTTING SIDE PILLARS. OPEN DOOR AND START FROM DOOR JAMB WITH HACKSAW WORKING TOWARD REAR CORNERS. DO NOT CUT ALL THE WAY THROUGH YET, THIS WILL HELP AVOID PINCHING UNTIL READY TO REMOVE TOP.

 8. USING A DIE GRINDER START ROOF CUT BY MAKING STARTER SLOT AT
- BACK MOLDING AS A "FENCE" TO GUIDE AIR SHEARS. PRECISION IS
 IMPORTANT, DO NOT RUSH THIS CUT. CUT TOP OF ROOF FROM END TO END
 FOLLOWING PRECISELY ON. MARKS SCRIBED.
- 9. DOOR FRAME CUT: SEE ROOF CUTTING GUIDE FOR REFERENCE MEASUREMENTS. BE SURE TO GET ASSISTANCE TO HOLD FRAME STEADY TO MINIMIZE VIBRATION DURING CUTS. USE DIE GRINDER FOR MAKING CUTS. MAKE SURE ALL RUBBER MOULDINGS AND TRIM ARE REMOVED OR PULLED ASIDE. MARK AND TAPE FRONT OF DOOR FRAMES, CONTINUING SAME ANGLE AS ROOF LINE (SEE ILL. 9b), CUT ALONG TAPE GUIDES. CUT REAR DOOR
- FRAME AT SAME LEVEL AS REAR PILLAR POST YOU JUST CUT. NOTE: FOLLOWING STEPS SHOULD ONLY BE DONE AFTER LOWER REAR CAB WALL IS CUT SO THAT CORNER OF CUTS ARE NOT COMPLETED UNTIL REMAINING REAR CAB WALL CUTS ARE MADE.
- 10. OPEN DOORS AND CUT CORNERS THROUGH HEADER WITH HACKSAW ON SAME LINE AND ANGLE SCRIBED ON ROOF AS USED EARLIER UNTIL YOU REACH AIR SHEAR CUT. YOU NOW SHOULD BE ABLE TO LIFT OFF ROOF, UNLESS YOUR TRUCK HAS 2ND LAYER OF METAL. YOU CAN REMOVE ROF WITHOUT CUTTING THROUGH 2ND LAYER IF YOU USE A LOOSE HACKSAW BLADE TO SEPARATE SILICOJNE BONDING THOSE LAYERS. NOW YOU CAN LIFT OFF ROOF. NOW YOU TRIM 2ND LAYER OF METAL USING AIR SHEARS IN SAME MANNER AS 1ST LAYER.
- NOTE: BE SURE TO KEEP SAME ESTABLISHED 90 DEGREE ANGLE TO OP SLOPE OF ROOF. USE A FLAT SURFACE SUCH AS WODEN BLOCK TO ENSURE PROPER ANGLE AND AMOUNT TRIMMED.
- 11. LIFT OFF ROOF AND PLACE ON PROTECTED SURFACE, TRIM ENDS OF ROF SECTION TO MATCH MATERIAL TRIMMED FROM CENTER (3/8"). AFTER TRIMMING MATCH ROOF BACK UP TO TRUCK WITH REAR PILLAR CAPS TEMPORARILY ON, BUT NOT FRONT BOWS, TO ENSURE YOU HAVE NO "HIGH SPOTS" (LINE UP RAIN GUTTERS).
- NOTE: IF YOU DO NOT PROPERLY ACCOMPLISH TRIMMING THE 3/8" METAL OFF ROOF, YOUR TOP CAN NOT ALIGN CORRECTLY. PAY SPECIAL ATTENTION TO THE CORNERS AND ANGLES TO MAKE SURE YOU HAVE AT LEAST 1/4" CLEAR SPACE WITH RAIN GUTTERS IN ALIGNMENT AND WITHOUT FRONT BOWS ON.

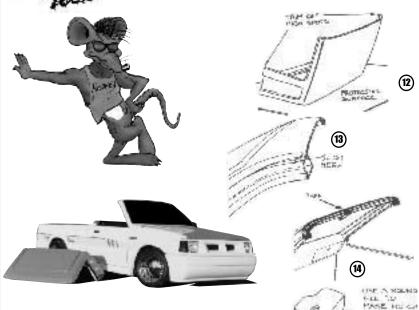
YOU ARE NOW READY TO PREPARE THE ROOF.

RATICAL HARD TOP INSTALL

(16)

(18)

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FOR REATTACHING NARROW WINDOW FRAMES ONLY: (MAZDA 77-85 WILL NOT REATTACH!)

A. REMOVE INNER AND OUTER RUBBER SEALS. REMOVE SMALL METAL PROTRUSION ON BACK SIDE OF FRAME, USING A DIE GRINDER OR ABRASIVE SANDING DISK (IF PRESENT).

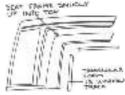
B. HOLD FRAME UP TO TOP AND MAKE SURE THAT FRAME SEATS IN COMPLETELY SO THERE IS NO CLEARANCE BETWEEN FRAME AND ROOF. YOU MAY HAVE TO SQUARE UP CORNER ON ROOF PORTION AND ROUND UP INNER EDGE ON BACK SIDE OF FRAME TO ALLOW FRAME TO SEAT COMPLETELY INTO CORNER.

C. WITH TOP IN PLACE, YOUR WINDOW AND DOOR FRAME SHOULD OPEN AND CLOSE WITH PROPER CLEARANCE. INSTALL TRIANGULAR FOAM (PROVIDED IN KIT) IN PLACE OF INNER CHANNEL RUBBER / FELT WINDOW GUIDES PREVIOUSLY REMOVED.

NOTE: THIS TECHNIQUE WILL WORK ON MOST NARROW WINDOW FRAME TRUCKS, SOME MODELS (i.e. DODGE, NISSAN, ISUZU) IT WILL BE NECESSARY TO REMOVE SOME OF OUTER REAR LIP TO ALLOW WINDOW TO CLEAR. TRIM AS NEEDED. IT IS RECOMMENDED THAT YOU INSTALL NEW DOOR SEALS WHEN INSTALL IS COMPLETE. GROVE WHERE FRAME MEETS ROOF SHOULD BE SEALED WATER TIGHT WITH MARINE-TEX, OR SEALANT (URETHANE IF PAINTING)

NARROW WINDOW FRAME





WIDE WINDOW FRAME

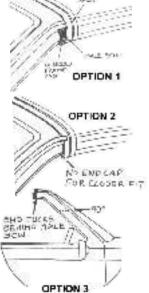
FOR REATTACHING WIDE WINDOW FRAMES ONLY:

(EXCEPTIONS ON FORD RANGER)
A. ATTACH ORIGINAL PINCH MOLDING ON ROOF WINDOW FRAME

AREA AND TRIM TO FIT. (GENERALLY COLOR OF YOUR INTERIOR TRIM)
B. NEXT DISCARD ORIGINAL SEAL ON BACK SIDE OF YOUR WINDOW
FRAME. YOU WILL BE SILICONING OUTER SEAM WHEN YOU ARE
FINISHED, SO YOU WILL NOT HAVE TO REINSTALL SEAL. IDEA IS TO
MOUNT WINDOW FRAMES AND OBTAIN SAME SPACING AND
ILEADANCE THAT ERAME HAD RECORD BENOVING. EYEED TOORD.

CLEARANCE THAT FRAME HAD BEFORE REMOVING, EXCEPT FORD RANGER WHICH WILL BE MOUNTED WITH NO GAP AND IS AS TIGHT TO ROOF SECTION AS POSSIBLE.

C. TAPE WINDOW FRAMES IN POSITION, USING SHIMS OR SPACERS TO KEEP SPACE DESIRED TEMPORARILY. WHEN YOU APPLY EPOXY TO PILLAR POST CAP, FRAME WILL BE HELD IN PROPER POSITION.



YOU ARE NOW READY TO PREPARE THE ROOF.

12. PLACE ROOF UPSIDE DOWN ON PROTECTED SURFACE. ADDITIONAL PORTION OF METAL MAY HAVE TO BE REMOVED FROM CORNER EDGES OF ROOF AS SHOWN IN ILLUSTRATION 11. HOLD THE FEMALE BOW ENDS UP TO CORNERS TO GET AN INDICATION OF FIT. THIS IS SO RECESSED PORTION OF FEMALE BOW WILL FIT ONTO ENDS WITHOUT OBSTRUCTIONS. USE DIE GRINDER TO REMOVE OBSTRUCTING AREA.

13. PREPARE TO FIT MALE BOW. DO NOT MAKE ANY TRIM CORRECTIONS TO PLASTIC PARTS. MAKE SURE METAL IS PROPERLY TRIMMED, WITH HIGH SPOTS REMOVED. DO NOT CHASE ANY LOW SPOTS, IF ANY.

NOTE: MAKE SURE TO PRE-SCUFF ALL PLASTIC PARTS FOR BETTER ADHESION. AT THIS POINT MAKE A DRY FIT OF BOWS AND PILLAR CAPS.

14. TO PREVENT RUST, COAT THE CUT PORTION OF WINDSHIELD HEADER WITH RUST PREVENTION AGENT. CUT A 1/8" SLOT IN THE RAIN GUTTERS ON EACH SIDE TO ALLOW MALE BOW TO FIT SNUGLY NEXT TO BODY. DO NOT CUT ABS BOW! STARTING AT EITHER END, WITH AN ASSISTANT, WORK ABS MALE BOW IN POSITION. IT WILL FLEX TO FIT CONTOUR OF CUT LINE. USE DUCT TAPE TO HOLD IN POSITION TEMPORARILY.

15. IF SATISFIED WITH FIT, LEAVE MALE BOW IN PLACE TEMPORARILY AND PROCEED WITH NEXT STEP. PERMANENT INSTALL WILL BE TOWARDS END (DO NOT ATTACH YET!) MAKE SURE YOU HAVE PLACED LOWER ENDS OVER PLASTIC TRIM ON INNER WINDOW POSTS, IF ANY. (ENDS MUST SEAT IN COMPLETELY) FIT ON LOWER FEMALE POST CAPS. FIT REAR CAB WALL COVER AS SNUGLY AS POSSIBLE ON REAR CAB WALL.

NOTE: ON SINGLE LAYER BACK WALLS A 7/8" X 4" WOOD INSERT IS USED TO CREATE A DOUBLE LAYER WALL APPEARANCE. THIS PIECE SHOULD BE CUT IN TWO AND INSERTED UNDER AND INTO SIDE PILLAR CAPS TO FORM A BRIDGE TO ATTACH JOINED PORTIONS OF PILLAR CAPS AND CAB WALL COVER. USE SMALL SCREWS, OR RIVETS, TO ATTACH THROUGH REAR CAB WALL. ABS REAR COVER WILL COVER THE RIVETS OR SCREWS. USE EPOXY TO BOND IN PLACE.

16. FITTING ON LOWER WINDOW END CAPS: MAKE ALL WINDOW END CAPS FIT ON WITHOUT FORCING OR EXCESSIVE PRESSURE. REMOVE ANY EXCESS METAL, IF NECESSARY, TO FIT CAPS ON EASILY AND RELAXED. NOTE: IF NOT INSTALLED PROPERLY, OPENING AND CLOSING DOORS AND TEMPERATURE CHANGES WILL BREAK CAPS!!

17. YOU WILL NOTICE THAT WINDOW SLOT HAS NOT BEEN CUT IN WINDOW END CAPS, THIS IS SO THAT YOU MAY TRIM FOR YOUR PARTICULAR VEHICLE. CUT CAREFULLY, BECAUSE HOW AND WHERE YOU TRIM WILL DETERMINE TRACKING OF YOUR WINDOW INTO UPPER WINDOW CHANNEL. ROLL UP YOUR WINDOW AND CHECK IT BEFORE YOU TRIM!! (SEE ILLUSTRATION) NEVER TRIM ANY DEEPER OR WIDER THAN NEEDED. USE A SMALL RATTAIL FILE, YOU MAY HAVE TO MAKE A SLIGHT ANGLE CUT TO ALLOW WINDOW TO TRACK PROPERLY INTO UPPER CHANNEL.

18. TRIM WINDOW FRAMES BY OPENING BOTH DOORS ON TRUCK. CAREFULLY PLACE ROOF ON TOP OF TRUCK, BE CAREFUL NOT TO SCRATCH ANY PLASTIC PARTS INSTALLED. PLACE CLOTH OVER PLASTIC. HOLD ROOF INTO APPROX. FINISHED POSITION AND GENTLY CLOSE DOOR WITH WINDOW ROLLED UP COMPLETELY (DO NOT OVER EXTEND WINDOW)

19. USE A MARKER TO INDICATE AREA TO BE TRIMMED OUT OF FRAME.

NOTE: ON S-10, REAR TRIM LINE WILL BE AT AN ANGLE. MAKE SURE WINDOW IS TRAVELING UP COMPLETELY. IF NOT MAKE CORRECTIONS. REMOVE TOP. TRIM AND FILE OFF ROUGH OR SHARP EDGES ON FRAMES.

2ND WINDOW FRAME CUT OPTION 1:

A. MARK A LINE APPROXIMATLY 3/4" BACK FROM FIRST CUT ON UPPER WINDOW FRAME AND CUT OFF KEEPING SAME ANGLE AS FIRST CUT.

B. AFTER CUTTING YOUR WINDOW FRAMES OFF. UPPER DOOR WINDOW FRAME SHOULD CLOSE BEHIND MALE BOW. TRIM BACK ACCORDINGLY AS PER ABOVE. AT THIS TIME YOU MUST TRIM AND FINISH ALL METAL SURFACES ON TRUCK AND ROOF.

C. FRONT WINDOW END CAPS ARE TO BE INSTALLED JUST IN FRONT OF MALE BOW. GRIND AND FILE METAL TO ALLOW BEST POSSIBLE FIT, CLOSE BEHIND MALE BOW. YOU MUST REMOVE APPROXIMATELY 1/2" OF SMALL METAL LIP WHERE INSIDE SEAL FITS. BE PATIENT AND TRIM FOR BEST FIT.

D. BOND IN PLACE, SNUGLY BEHIND MALE BOW. YOU CAN FILE BACK OF MALE BOW, IF NECESSARY, TO CREATE A SCISSOR TIGHT FIT. 2ND WINDOW FRAME CUT OPTION 2:

A. FOLLOW STEPS A AND B OF OPTION 1. DO NOT INSTALL END CAP, INSTEAD CUT THE DOOR FRAME AS PRECISELY AS YOU CAN, SO AS TO BARELY MISS BACK OF MALE BOW. THIS WILL HELP REDUCE LEAKAGE POTENTIAL

B. FILE OFF ANY SHARP EDGES.

It is our opinion that you get a more professional install by not using upper window end caps on convertibles and our targa. If you cut and trim carefully, window ends can fit snugly behind male bow on convertibles and squarely on top of bow on targa top installs

2ND WINDOW FRAME CUT OPTION 3:

This is the most effective and cleanest looking method, it is however more work.

A. INSTEAD OF CUTTING 3/4" BACK FROM FIRST CUT, MARK
APPROXIMATELY 4" DOWN FROM FIRST CUT, MAKE THE MARK EXACTLY
PARALLEL TO GROUND.

B.USING A DIE GRINDER OR HACK SAW CUT THIS POINT PERFECTLY LEVEL, THIS IS CRUCIAL IN ORDER FOR YOUR DOOR TO OPEN.

C. REATTACH UPPER PORTION, TUCKING THE UPPER END BEHIND AND INTO MALE BOW, (IF POSSIBLE), USE SAME METHOD OF ATTACHING THE PART OF FRAME, AS UPPER PORTION, BY SCREWING IT ON.

D. FILE OFF ANY SHARP EDGES, AND USE EPOXY OR URETHANE TO CREATE A CLEAN FACTORY LOOK BY FILLING EXPOSED AREAS OF METAL.

RATICAL HARD TOP INSTALL WW.CHASSISTECH.COM (20) WOOD CHACER FEMALE (28) WINDOW TRIM INSTALLATION 1. INSTALL TRIANGULAR SEAL INSIDE YOUR WINDOW CHANNEL, CUTTING CORNERS TO 45 DEGREES FOR BEST FIT AND APPEARANCE. 2. REINSTALL ALL ORIGINAL TRIM AROUND INSIDE DOOR AREAS. NOTE: FOAM TRIM SUPPLIED IS FOR USE AT YOUR BEST DISCRETION TO INSURE LEAKPROOF SEAL. PAY SPECIAL ATTENTION AT BOTTOM REAR OF WINDOWS TO TRIM OR SUPER GLUE AS NEEDED TO AVOID WINDOW FROM TEARING TRIM WHEN ROLLING UP. MAKE CORRECTIONS AS NECESSARY FOR BEST FIT. SEAL KIT INSTALLATION (FOR FEMALE BOW) 1. MAKE SURE SURFACE IS FREE FROM ALL DIRT AND GREASE. INSTALL TOP RUBBER SEAL FIRST, CONFORMING TO CURVATURE OF BOW AS ILLUSTRATED. LEAVE APPROXIMATELY 1/3" HANGING OVER ENDS SO WATER DOESN'T DRIP INTO CAP AT TOP OF WINDOW. 2. USE SUPER GLUE OR LOCKTITE TO GLUE IN POSITION. DO NOT USE ANY OTHER TYPE OF ADHESIVE, NOTE THAT BOTTOM SEAL DOES NOT CONFORM TO CURVATURE FOR EASE OF INSTALLATION. 3. MAKE SURE TOP SEAL EXTENDS PAST END OF FEMALE BOW APPROXIMATELY 1/3" SO WATER WILL FOR A DRIP POINT AT END RATHER THAN INTO TRUCK.

20. PRE-FITTING FEMALE BOW:

REMOVE WOOD SPACERS FROM FEMALE ABS BOW. DO NOT DISCARD! THEY SERVE AN IMPORTANT ROLE KEEPING SPACE TO PREVENT GAP BETWEEN FEMALE BOW AND ROOF ON TOP SIDE OF VEHICLE. SHIM THESE SPACERS AS NECESSARY TO ELIMINATE ANY GAP. THEY WILL BE EPOXIED IN PLACE WHEN BONDING ROOF. 21. USING AN ASSISTANT, START AT EITHER END OF ROOF AND FIT FEMALE BOW TO TOP, FITTING LEADING EDGE OF ROOF UNDER UPPER PORTION OF FEMALE BOW. TEMPORARILY TAPE IN PLACE.

22. TEMPORARILY TAPE IN PLACE MALE PILLAR POST CAPS, MAKING SURE THEY FIT PROPERLY. LEAVE UPPER CAB WALL COVER UNTIL BONDING PARTS ON.

YOU ARE NOW READY TO MAKE A FIT CHECK OF YOUR ROOF

NOTE: DO NOT EPOXY PARTS ON UNTIL YOU HAVE INSTALLED AND SECURED LATCHES AND ARE SATISFIED WITH FIT.

23. PLACE ROOF ON TRUCK INSERTING FEMALE BOW OVER MALE BOW, THEN, SETTING ROOF IN POSITION BY INTERLOCKING REAR PILLAR POST CAPS. GET INSIDE VEHICLE AND HOLD LATCHES IN POSITION ON ROOF BEHIND FEMALE BOW. YOU WILL ATTACH LATCH THROUGH HEADLINER AND PLASTIC TRIM, EXTEND UPPER LATCH 3/4 OUT, WITH LATCH CLOSED, MAKE SURE LATCH HOOK REACHES INTO WINDSHIELD HEADER AREA. MARK BOLT HOLE WITH MARKER.

24. REMOVE ROOF AND FEMALE BOW, DRILL 1/4" LATCH BOLT HOLE WHERE MARKED ON ROOF. INSTALL LATCH USING WASHERS AND BOLT IN EXACTLY SAME WAY AS ILLUSTRATION.

25. PLACE ROOF IN PLACE AGAIN, THIS TIME TO INSTALL REAR LOWER LATCH. INSTALL KEEPER FIRST, BUTTING UP TO ABS PLASTIC LOWER PILLAR CAP. THEN INSTALL LATCH PORTION APPROXIMATELY 1 1/2" UP FROM UPPER ABS PILLAR CAP. IF KEEPER PUSHES IN DURING ATTACHMENT, USE CLAW HAMMER TO LEVERAGE OUT FOR ALIGNMENT. EXTEND UPPER LATCH 3/4 OUT, WITH LATCH CLOSED, PLACE KEEPER IN APPROXIMATE LOCATION ON HEADER FOR LATCHING. TO MOUNT IN PLACE, USE 3/16" RIVETS, THEN LATCH AND ADJUST. (DO NOT OVER TIGHTEN!!) 26. AT THIS TIME INSERT WOOD BLOCK UNDER FEMALE BOW AND SHIM TIGHTLY. THIS WILL ELIMINATE SPACE BETWEEN ROOF AND FEMALE BOW. TAPE AROUND ALL PLASTIC CAPS AND BOWS ONCE YOU ARE SATISFIED WITH FIT. THIS WILL BE PERMANENT LOCATION OF ALL PARTS ONCE YOU PERMANENTLY INSTALL THEM. 27. YOU CAN NOW PERMANENTLY INSTALL PLASTIC PARTS. FIRST LAY DOWN A STRIP OF TAPE NEXT TO PARTS INDICATING FINISHED FIT LINE. DO NOT REMOVE TAPE UNTIL AFTER BONDING PART ON!! THIS WILL PROTECT PAINT FROM FPOXY AND GIVE CLEAN FINISHED LOOK. REMOVE ALL ABS PLASTIC FROM TRUCK AND ROOF. SCUFF AND PREPARE SURFACES, ESPECIALLY IN BOW AREAS. USE A DIE GRINDER TO SCORE METAL, THIS PROMOTES GOOD ADHESION.

NOTE: READ INSTRUCTIONS ON EPOXY AN ALLOW AMPLE WORKING AND CURING TIME BEFORE PROCEEDING. USING MORE CATALYST WILL SPEED CURE TIME IF NEEDED. DO NOT USE RIVETS, URETHANE OR SILICONE TO ATTACH, THIS WILL VOID WARRANTY.

28. PREPARE ALL SURFACES TO BE BONDED, INCLUDING ABS PLASTIC. MIX AMPLE AMOUNT OF EPOXY TO COMPLETE JOB. WORK WITH AN ASSISTANT AND APPLY EPOXY TO PART AND BODY.

- a) 4 PILLAR POST CAPS
- b) MALE AND FEMALE BOWS
- c) UPPER AND LOWER REAR CAB WALL COVERS

DO WINDOW FRAME END CAPS LAST, AFTER COMPLETING INSTALL. 29. TAPE MALE BOW IN PLACE, MAKING SURE IT IS FULLY SEATED. WE SUGGEST YOU USE DUCT TAPE AND DRAW A PIECE OVER FRONT WINDSHIELD AND ADHERE IT TO MIDDLE OF WINDSHIELD INSIDE. FIT FEMALE BOW TO ROOF SECTION AND WITH AN ASSISTANT, REPLACE AND LATCH ROOF IN PLACE, ON TRUCK. MAKE SPECIAL ATTENTION TO REINSTALL WOOD BLOCKS AND SHIM TIGHTLY IN FEMALE BOW, THIS WILL DRAW BOW DOWN TIGHTLY TO ROOF SKIN, USE EPOXY TO SECURE AND TIGHTLY LOCK IN PLACE.

30. REMOVE ALL TAPE, PULLING TOWARD YOU AND ACROSS PART. THIS GIVES A CRISP LINE. VERIFY THAT ALL PARTS ARE IN PROPER POSITIONS AND PUT TRUCK IN DIRECT SUNLIGHT FOR FASTER CURE TIME. DO NOT REMOVE TOP EARLY!! REMOVE ALL EXCESS EPOXY AND ALL TAPE BEFORE EPOXY SETS UP. 31. YOU NOW MUST SEAL EVERYTHING WITH BLACK SILICONE. PUT STRIP OF DUCT TAPE DOWN ADJACENT TO ALL ABS PARTS YOU INSTALLED. DRAW A STRIP OF BLACK SILICONE DOWN ENTIRE SEAM AREA. USE FINGER TO COMPRESS SILICONE INTO CREVICE TO MAKE SMOOTH SEAM. (WET FINGER FOR SMOOTH FINISH.) 32. REMOVE TAPE IMMEDIATELY, PULLING TAPE TOWARD YOU (NOT AWAY) FROM ABS PART. THIS WILL BE FOR CLEAN CRISP EDGE. PUT SILICONE ON BACK SIDE OF MALE BOW ENDS AT LEAK POINT. USE SILICONE AT END OF RAIN GUTTER WHERE IT MEETS MALE BOW.

NOTE: OPTIONAL, BUT TO FINISH MALE BOW WITH PROFESSIONAL LOOK YOU CAN BACK-FILL CORNERS WITH BONDO. THIS WILL ALSO CREATE GOD INNER SEAL DEPENDING ON YOUR ABILITY TO WORK IT. WINDOW END CAP AND BACK OF MALE BOW SHOULD BE AS CLOSE AS POSSIBLE WITHOUT INTERFERING WITH OPENING AND CLOSING OF DOOR. FINISH OFF AND USE FLAT BLACK PAINT TO TOUCH UP. YOU CAN ALSO CREATE YOUR OWN WATER SEAL AT BACK OF MALE BOW WHERE END CAPS SEAT BY FILLING BACK OF BOW WITH RTV SILICONE THEN COATING END CAP WITH GREASE SO PREVENT ITS ADHESION. GENTLY CLOSE DOOR AND LET SET FOR SEVERAL HOURS, THEN FINISH TRIM.

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S-10 WINDOW KIT INSTALL

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1982 - 1993 CHEVY S-10/GMC S-15

1. REMOVE ALL MOULDING FROME DOOR FRAME AREAS, REAR VIEW MIRRORS, PLASTIC PANELS FROM DOORS. YOU MUST INSTALL WINDOW REGULATORS PRIOR TO CUTTING WINDOW FRAME FOR ANY CONVERTIBLE TOP. BE CAREFUL NOT TO DING DOORS FROM INSIDE.

2. ROLL WINDOW INTO POSITION. REMOVE WINDOW CRANK HANDLE, PLASTIC SPEAKER INSERTS, AND VENT.

3. DISCONNECT WINDOW GLASS FROM HORIZONTAL TRACK BY REMOVING TWO 3/8" BOLTS (SAVE FOR LATER). REMOVE AND DISCARD PLASTIC SPACER. TILT WINDOW FRONT DOWN AND GENTLY PULL UP FROM REAR AND REMOVE. 4. SLIDE HORIZONTAL TRACK OFF SUPORT ROLLER. REMOVE SCREW CLIPS INSIDE DOOR FRAME THAT ATTACH DOOR HANDLE TO OUTER DOOR

SKIN. REMOVE DOOR LINKAGE BY SLIDING IT OUT OF PLASTIC BUSHING, THEN REMOVE DOOR HANDLE. 5. MODIFY DOOR HANDLE BY CUTTING OFF TWO SCREW STUDS PREVIOUSLY USED TO MOUNT HANDLE. THEN DRILL TWO 1/4" HOLES IN EXACT

LOCATION AS STUDS. METAL IS VERY HARD SO USE APPROPRIATE DRILL BIT.

6. INSERT NEW REGULATOR EITHER THROUGH END OR TOP OF WINDOW. FASTEN DOOR HANDLE TO TOP SUPPORT BAR OF VERTICLE WINDOW. GUIDE USING SUPLIED BOLTS, SANDWICHING OUTER DOOR SKIN BETWEEN THEM. DO NOT TIGHTEN YET!! ON NEWER MODELS CUT OF EXCESS PLASTIC FROM GASKET AS SHOWN.

7. RE-POSITION PLASTIC GASKET ON WINDOW GLASS. POSITION NEW HORIZONTAL TRACK MECHANISM ONTO SUPORT ARM. ALIGN NEW HORIZONTAL TRACK MECHANISM SO THAT IT SLIDES UP AND DOWN ON VERTICAL GUIDE. REINSTALL WINDOW AND ATTACH THIS TRACK MECHANISM TO WINDOW GLASS USING STOCK BOLTS AND TIGHTEN. DO NOT OVERTIGHTEN BOLTS, IT MAY BREAK GLASS!!

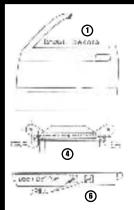
8. CRANK WINDOW TO ITS DOWN MOST POSITION. ADJUST DISTANCE BETWEEN VERTICLE GUIDE TO ARMS SO THAT WINDOW MECHANISM MOVES FREELY UP AND DOWN ON TRACK. DRILL TWO OVERSIZED HOLES INTO BOTTOM OF DOOR AT LOCATION WHERE VERTICLE WINDOW GUIDE TOUCHES. CAREFUL POSITIONING WILL BE REQUIRED. OUTER EDGE OF DOOR MAY BE USED AS REFERENCE.

9. USING BOLTS AND WASHERS SUPPLIED, ATTACH BOTTOM OF WINDOW GUIDE TO DOOR. DO NOT TIGHTEN YET!! WITH WINDOW IN DOWN MOST POSITION, ADJUST DISTANCE BETWEEN VERTICLE WINDOW GUIDE ARMS SO WINDOW MECHANISM MOVES FREELY UP AND DOWN TRACK. NOW TIGHTEN TWO BOLTS ON BOTTOM OF DOOR. TIGHTEN TWO BOLTS ON DOOR HANDLE AT THIS TIME.

10. SMOOTH WINDOW OPERATION BY LUBRICATING VERTICAL WINDOW GUIDE ASSEMBLY. REPLACE DOOR PANEL AND HARDWARE NOTE: IF WINDOW DOES NOT OPERATE SMOTHLY OR IS TIGHT, IT MAY BE NECESSARY TO REMOVE AND DISCARD PLASTIC INSERTS ON FRONT AND REAR OF WINDOW. IN SOME CASES THIS PIECE ACTS TO BIND GLASS, ALSO LOWER RUBBER IN WINDOW CHANNEL IS NOT IMPERATIVE. IF WINDW DES NOT TRACK PROPERLY INTO TOP FRONT OF FRAME, A MINOR CORRECTION CAN BE MADE BY:

a. RE-POSITION WINDOW REGULATOR ANGLE TO CHANGE ANGLE OF WINDOW TRAVEL.

b. TRIM WINDOW CAP TO HOLD WINDOW IN DESIRED POSITION.



(9)

DAKOTA WINDOW KIT INSTALL

1987-1993 DODGE DAKOTA

DAKOTA DOOR INSTALL IS SIMILAR TO S-10/S-15, WITH MAJOR EXCEPTION BEING DOOR HANDLE IS NOT REMOVED TO ATTACH WINDOW KIT, AND METHOD TO REGULATE AND STOPPING OERCRANKING WINDOW UPWARD TRAVEL.

1. REMOVE DOOR PANEL. REMOVE ALL TRIM AROUND INSIDE DOOR HANDLE, PULLING OUT AND BACK. ROLL DOWN WINDOWS AND DRILL OUT PLASTIC RIVETS IN BOTTOM OF PLASTIC FACTORY WINDOW REGULATOR.

2. REMOVE WINDOW, LOOSENING FRONT WINDOW TRACK BOLT FIRST.

3. DRILL OUT PLASTIC WASHERS TO 1/4". RIVETS WILL BE REPLACED WITH 1/4" SCREWS AT REASSEMBLY. LOOSEN FRONT WINDOW TRACK. REMOVE UPER WINDOW WIPER (FUZZIE) AT TOP OF DOOR SILL.

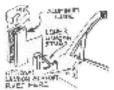
4. INSTALL NEW WINDOW SLIDE KIT FROM TOP OF DOOR. BOLT PLASTIC WINDOW REGULATOR TO WINDOW SLIDER WITH 1/4" BOLTS, INSTALLING ONLY FINGER TIGHT AT THIS TIME.

5. PUT WINDOW SLIDER UNIT ON WINDOW TRACK JUST INSTALLED. REINSTALL WINDOW WIPER (FUZZIE) ON DOOR SILL. INSTALL WINDOW, BOLTING IT TO REGULATOR SLIDER UNIT WITH 1/4" BOLTS, ONLY TIGHTENING FINGER TIGHT AT THIS TIME.

6. WITH WINDOW DOWN, DRILL TWO 1/4" HOLES IN BOTTOM OF DOOR THROUGH REGULATOR TRACK FEET. BOLT FEET TO BOTTOM OF DOOR WITH 1/4" BOLTS AND WASHERS, NOW TIGHTEN. USE WASHERS TO SPACE FEET IF NEEDED.

7. ROLL UP WINDOW, DRILL TWO PILOT HOLES FOR SHEET METAL SCREWS THROUGH 2ND SKIN OF DOOR FRAME AT TOP OF WINDOW REGULATOR. USE SILICONE ON NEW REGULATOR BEFORE SCREWING IN PLACE TO REDUCE SCREWS FROM COMING LOOSE.

8. TEST WINDOW TRAVEL BY ROLLING UP AND DOWN, IT MUST MOVE FREELY. TIGHTEN ALL BOLTS YOU PREVIOUSLY LEFT FINGER TIGHT. LUBE WINDOW SLIDER, REINSTALL DOOR PANEL.



TOYOTA WINDOW KIT INSTALL

OPTIONAL TOYOTA KIT

SOME TOYOTAS REQUIRE AN ALUMINUM WINDOW GUIDE TO BE INSTALLED UNDER ABS END CAP TO KEEP WINDOWS FROM ROCKING. THE RULE IS: IF THERE IS ROOM TO INSTALL IT, YOU NEED IT! IF YOUR TOYOTA DOES NOT HAVE A WIND WING, YOU MAY WANT TO INSTALL A VERTICAL ALUMINUM SUPORT TO GIVE MORE STABILITY TO WINDOW FRAME, AND IT ALSO ACTS AS GUIDE TO KEEP WINDOW FROM FLOPPING IN AND OUTWARD. YOU WILL HAVE TO REMOVE DOOR PANELS AND RUBBER TRIM ON TOP OF WINDOW SILL. INSTALL ARM THROUGH EXISTING SLOT AND LINE UP WITH EXSISTING HOLE IN DOOR PANEL. DRILL 3/16" HOLE THROUGH ALUMINUM SUPPORT AFTER DETERMINING EXACT LENGTH YOU NEED TO KEEP WINDOW ROLLING UP TO PROPER DISTANCE. USE A RIVET TO ATTACH THIS.



ITING WINDOW TRAVEL

WINDOW TRAVEL MUST BE LIMITED ON ALL CONVERTIBLE AND TAGRA TRUCKS. IF YOU FAIL TO DO SO, WINDOW WILL OVERCRANK AND WILL PUSH UP ON WINDOW FRAME, AND WINDOW WILL NOT SEAT AGAINST BOW PROPERLY.





CHEVY S-10

0 MAZDA

RESTRUTION

NARROW WINDOW FRAMES

FULL SIZE CHEVY EXAMPLE

REPLACE THIS BOLT WITH SLIGHTLY LONGER BOLT, NOT TO REACH GLASS, AND NUT. NOTCH ARM (1) IF NEDDED TO ADJUST. **CHEVY S-10 EXAMPLE**

GLUE IN PLACE RESTRICTOR, A SMALL RUBBER HOSE OR PIECE OF WOOD, TO LIMIT TRAVEL OF WINDOW.

DODGE DAKOTA EXAMPLE

INSTALL 1/4" BOLT WITH NUT WHERE SHOWN.

NARROW WINDOW FRAME EXAMPLE

DRILL A HOLE IN INNER DOOR FRAME AND INSTALL AN EXCEPTABLE LENGTH BOLT AND NUT IN POSITION IN FRONT OF SPROCKET TO LIMIT UPWARD TRAVEL OF WINDOW,

MAZDA EXAMPLE

DRILL HOLES AT "A" LARGER SO YOU CAN CONTROL TILT OF WINDOW. INSTALL SMALL BLOCK OF WOOD AT POINT INDICATED TO RESTRICT UPWARD TRAVEL OF WINDOW

4

S-10 WINDOW KIT INSTALL

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1982 - 1993 CHEVY S-10/GMC S-15

1. REMOVE ALL MOULDING FROME DOOR FRAME AREAS, REAR VIEW MIRRORS, PLASTIC PANELS FROM DOORS. YOU MUST INSTALL WINDOW REGULATORS PRIOR TO CUTTING WINDOW FRAME FOR ANY CONVERTIBLE TOP. BE CAREFUL NOT TO DING DOORS FROM INSIDE.

2. ROLL WINDOW INTO POSITION. REMOVE WINDOW CRANK HANDLE, PLASTIC SPEAKER INSERTS, AND VENT.

3. DISCONNECT WINDOW GLASS FROM HORIZONTAL TRACK BY REMOVING TWO 3/8" BOLTS (SAVE FOR LATER). REMOVE AND DISCARD PLASTIC SPACER. TILT WINDOW FRONT DOWN AND GENTLY PULL UP FROM REAR AND REMOVE. 4. SLIDE HORIZONTAL TRACK OFF SUPORT ROLLER. REMOVE SCREW CLIPS INSIDE DOOR FRAME THAT ATTACH DOOR HANDLE TO OUTER DOOR

SKIN. REMOVE DOOR LINKAGE BY SLIDING IT OUT OF PLASTIC BUSHING, THEN REMOVE DOOR HANDLE. 5. MODIFY DOOR HANDLE BY CUTTING OFF TWO SCREW STUDS PREVIOUSLY USED TO MOUNT HANDLE. THEN DRILL TWO 1/4" HOLES IN EXACT

LOCATION AS STUDS. METAL IS VERY HARD SO USE APPROPRIATE DRILL BIT.

6. INSERT NEW REGULATOR EITHER THROUGH END OR TOP OF WINDOW. FASTEN DOOR HANDLE TO TOP SUPPORT BAR OF VERTICLE WINDOW. GUIDE USING SUPLIED BOLTS, SANDWICHING OUTER DOOR SKIN BETWEEN THEM. DO NOT TIGHTEN YET!! ON NEWER MODELS CUT OF EXCESS PLASTIC FROM GASKET AS SHOWN.

7. RE-POSITION PLASTIC GASKET ON WINDOW GLASS. POSITION NEW HORIZONTAL TRACK MECHANISM ONTO SUPORT ARM. ALIGN NEW HORIZONTAL TRACK MECHANISM SO THAT IT SLIDES UP AND DOWN ON VERTICAL GUIDE. REINSTALL WINDOW AND ATTACH THIS TRACK MECHANISM TO WINDOW GLASS USING STOCK BOLTS AND TIGHTEN. DO NOT OVERTIGHTEN BOLTS, IT MAY BREAK GLASS!!

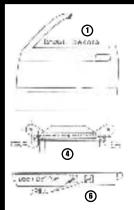
8. CRANK WINDOW TO ITS DOWN MOST POSITION. ADJUST DISTANCE BETWEEN VERTICLE GUIDE TO ARMS SO THAT WINDOW MECHANISM MOVES FREELY UP AND DOWN ON TRACK. DRILL TWO OVERSIZED HOLES INTO BOTTOM OF DOOR AT LOCATION WHERE VERTICLE WINDOW GUIDE TOUCHES. CAREFUL POSITIONING WILL BE REQUIRED. OUTER EDGE OF DOOR MAY BE USED AS REFERENCE.

9. USING BOLTS AND WASHERS SUPPLIED, ATTACH BOTTOM OF WINDOW GUIDE TO DOOR. DO NOT TIGHTEN YET!! WITH WINDOW IN DOWN MOST POSITION, ADJUST DISTANCE BETWEEN VERTICLE WINDOW GUIDE ARMS SO WINDOW MECHANISM MOVES FREELY UP AND DOWN TRACK. NOW TIGHTEN TWO BOLTS ON BOTTOM OF DOOR. TIGHTEN TWO BOLTS ON DOOR HANDLE AT THIS TIME.

10. SMOOTH WINDOW OPERATION BY LUBRICATING VERTICAL WINDOW GUIDE ASSEMBLY. REPLACE DOOR PANEL AND HARDWARE NOTE: IF WINDOW DOES NOT OPERATE SMOTHLY OR IS TIGHT, IT MAY BE NECESSARY TO REMOVE AND DISCARD PLASTIC INSERTS ON FRONT AND REAR OF WINDOW. IN SOME CASES THIS PIECE ACTS TO BIND GLASS, ALSO LOWER RUBBER IN WINDOW CHANNEL IS NOT IMPERATIVE. IF WINDW DES NOT TRACK PROPERLY INTO TOP FRONT OF FRAME, A MINOR CORRECTION CAN BE MADE BY:

a. RE-POSITION WINDOW REGULATOR ANGLE TO CHANGE ANGLE OF WINDOW TRAVEL.

b. TRIM WINDOW CAP TO HOLD WINDOW IN DESIRED POSITION.



(9)

DAKOTA WINDOW KIT INSTALL

1987-1993 DODGE DAKOTA

DAKOTA DOOR INSTALL IS SIMILAR TO S-10/S-15, WITH MAJOR EXCEPTION BEING DOOR HANDLE IS NOT REMOVED TO ATTACH WINDOW KIT, AND METHOD TO REGULATE AND STOPPING OERCRANKING WINDOW UPWARD TRAVEL.

1. REMOVE DOOR PANEL. REMOVE ALL TRIM AROUND INSIDE DOOR HANDLE, PULLING OUT AND BACK. ROLL DOWN WINDOWS AND DRILL OUT PLASTIC RIVETS IN BOTTOM OF PLASTIC FACTORY WINDOW REGULATOR.

2. REMOVE WINDOW, LOOSENING FRONT WINDOW TRACK BOLT FIRST.

3. DRILL OUT PLASTIC WASHERS TO 1/4". RIVETS WILL BE REPLACED WITH 1/4" SCREWS AT REASSEMBLY. LOOSEN FRONT WINDOW TRACK. REMOVE UPER WINDOW WIPER (FUZZIE) AT TOP OF DOOR SILL.

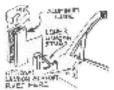
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7. ROLL UP WINDOW, DRILL TWO PILOT HOLES FOR SHEET METAL SCREWS THROUGH 2ND SKIN OF DOOR FRAME AT TOP OF WINDOW REGULATOR. USE SILICONE ON NEW REGULATOR BEFORE SCREWING IN PLACE TO REDUCE SCREWS FROM COMING LOOSE.

8. TEST WINDOW TRAVEL BY ROLLING UP AND DOWN, IT MUST MOVE FREELY. TIGHTEN ALL BOLTS YOU PREVIOUSLY LEFT FINGER TIGHT. LUBE WINDOW SLIDER, REINSTALL DOOR PANEL.



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CHEVY S-10

0 MAZDA

RESTRUTION

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FULL SIZE CHEVY EXAMPLE

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GLUE IN PLACE RESTRICTOR, A SMALL RUBBER HOSE OR PIECE OF WOOD, TO LIMIT TRAVEL OF WINDOW.

DODGE DAKOTA EXAMPLE

INSTALL 1/4" BOLT WITH NUT WHERE SHOWN.

NARROW WINDOW FRAME EXAMPLE

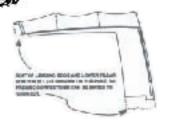
DRILL A HOLE IN INNER DOOR FRAME AND INSTALL AN EXCEPTABLE LENGTH BOLT AND NUT IN POSITION IN FRONT OF SPROCKET TO LIMIT UPWARD TRAVEL OF WINDOW,

MAZDA EXAMPLE

DRILL HOLES AT "A" LARGER SO YOU CAN CONTROL TILT OF WINDOW. INSTALL SMALL BLOCK OF WOOD AT POINT INDICATED TO RESTRICT UPWARD TRAVEL OF WINDOW

RATICAL SOFT TOP INSTALL

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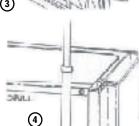
COMPLETELY COLLAPSING YOUR FRAME:

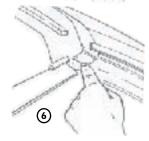
A. MARK FLOOR OF CAB PRECISELY WHERE BOTTOM OF TELESCOPING TUBE MEETS FLOOR, DRAWING ROUND CIRCLE AROUND IN SAME DIAMETER AS TUBE. HOLES MUST BE PRECISE SO FRAME TELESCOPES UP AND DOWN FREELY, SLIGHT OVERSIZE CAN BE DONE IF CENTERED EXACTLY.

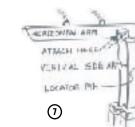
B. REMOVE FRAME. USING CENTER PUNCH, INDICATE CENTER OF CIRCLE. CHECK AREA UNDER MARKED LOCATION FOR ANY INTERFERENCE, RELOCATE INTERFERING PARTS AS ABLE. USING 1" METAL HOLE SAW BIT, DRILL THROUGH CAB FLOOR, GOING SLOWLY UNTIL JUST THROUGH FLOOR. FILE HOLE TO SLIGHTLY ENLARGE AND REMOVE SHARP EDGES.

C. REINSTALL FRAME, LOWERING IT TO YOUR DESIRED HEIGHT.

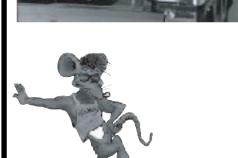
D. CONTINUE INSTALL AS OUTLINED FROM STEP 5.

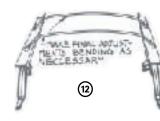














1. THIS INSTALL ASSUMES YOU HAVE ALREADY FOLLOWED HARDTOP INSTALL AND ARE UPGRADING TO SOFT TOP. ALSO, YOU MUST HAVE CAB REINFORCEMENT BAR INSTALLED. IF YOU HAVE NOT DONE SO, PLEASE REFER TO HARD TOP INSTRUCTIONS FOR REMOVAL OF TOP AND HOW TO INSTALL REINFORCEMENT BAR BEFORE CONTINUING.

NOTE: READ THROUGH ALL INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALL. ANY MODIFICATIONS MADE TO KIT, OR INSTALLATION BY UNQUALIFIED PERSON CAN RESULT IN POOR FITMENT, OR DAMAGE TO KIT AND VEHICLE.

2. BED OF TRUCK WILL NEED TO BE REMOVED FOR FITTING SNAPS AND TIGHTENING BOLTS PROPERLY. REMOVE SEATS, FLOOR COVERINGS, MATTING, ETC., AND ALSO ANY INTERIOR TRIM PIECES.

3. ASSEMBLING BACK PORTION OF FRAME: PULL 3/4" TELESCOPING TUBE FROM 7/8" TUBE. HEIGHT ADJUSTMENT HOLES HAVE NOT BEEN DRILLED YET, THIS WILL BE ACCOMPLISHED IN FINAL STEPS. ASSEMBLE FRAME AS SHOWN IN ILLUSTRATION. POSITION ASSEMBLED BACK PORTION PRECISELY CENTERED TO REAR OF CAB, TAKING REFERENCE MEASUREMENTS FROM POINTS SUCH AS OUTER CAB WALL, PILLAR POSTS. ETC.

4. ATTACH LOWER SQUARE ALUMINUM FRAME TO REAR CAB WALL BY DRILLING 1/8" HOLES. USE METAL SCREWS TO ATTACH. YOU MUST SPACE OUT 1" FROM REAR CAB WALL USING CAB REINFORCEMENT BAR OF 1" SPACERS. WITH FRAME FULLY COLLAPSED, OBSERVE HOW MUCH OF FRAME RISES ABOVE REAR CAB WALL. IF YOU DESIRE TO LOWER FRAME POSITION FURTHER, FOLLOW STEPS IN INSERT BOX.

5. TIGHTEN BRACKETS, HOLDING SUPPORTS FIRMLY IN POSITION. SEAL AROUND BASE ON FLOOR WITH MARINE-TEX OR EPOXY AND HOLD FRAME TIGHTLY IN PLACE.

6. RAISE TELESCOPING FRAME TO APPROXIMATE INTENDED HEIGHT, USE TAPE TO HOLD IN PLACE. EXTEND HORIZONTAL SIDE ARMS TO FRONT WINDSHIELD. ADJUST HEIGHT OF FRAME UNTIL IT PARALLELS TOP OF DOOR GLASS AT HEIGHT APPROXIMATELY 1/2" ABOVE DOOR GLASS. TEMPORARILY TAPE IN PLACE. DRILL 1/4" HOLE IN MALE BOW AS INDICATED BY SMALL DEPRESSION IN PART, UNLESS PREVIOUSLY DRILLED. INSERT GUIDE PINS AT END OF HORIZONTAL ARMS INTO HOLES. NOTE: CHECK ALL ALIGNMENT AND MEASUREMENTS BEFORE PROCEEDING TO NEXT STEPS.

INSTALLING VERTICAL SIDE ARMS AT REAR OF WINDOW:

POSITIONING SIDE ARMS DETERMINE QUALITY OF INSTALL, TAKE TIME BEFORE PERMANENTLY ATTACHING. THESE ARMS ARE INTENDED TO MOUNT RIGID, PERMANENTLY TO HORIZONTAL ARMS. USE CLAMPS TO HOLD IN PLACE WHILE DETERMINING EXACT LOCATION TO MOUNT AND DRILL HOLES IN HORIZONTAL SIDE ARMS, TRIM TO FIT.

7. ALLOW APPROXIMATELY 1/8" CLEARANCE BETWEEN LOWER PILLAR POST CAPS AND BOTTOM OF ARM. LINE VERTICAL ARM UP WITH REAR OF SIDE WINDOW, ALLOWING APPROXIMATELY 1/2" CLEARANCE. OPEN AND CLOSE DOORS WITH WINDOWS UP TO DOUBLE CHECK FOR PROPER CLEARANCES.

8. WHEN SATISFIED WITH FIT AND ALIGNMENT, DRILL AND SECURE SIDE ARMS

INSTALLING ALUMINUM LEADING EDGE "Z" STRIP:

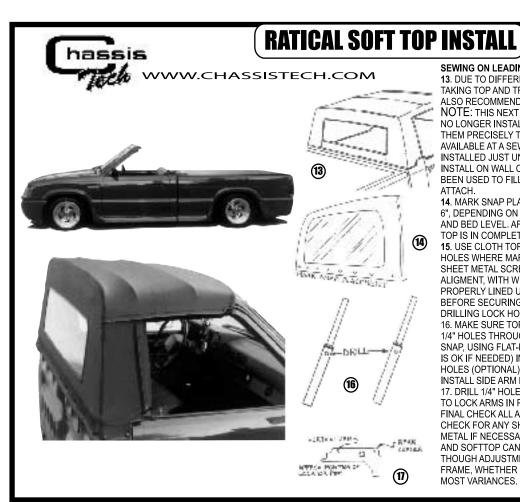
9. FIND CENTER OF ROOF AND CENTER OF ALUMINUM "Z" STRIP. STANDING ON FLOORBOARD OF TRUCK, AND STARTING FROM CENTER OF ROOF, PLACE "Z" STRIP ON TOP OF MALE BOW ON YOUR TRUCK. BE SURE PROPER EDGE IS FACING FORWARD! DRILL 1/8" HOLE AND INSTALL 1ST RIVET.

NOTE: ENDS OF ALUMINUM BOW CAN GO OVER RAIN GUTTER ON NARROW WINDOW FRAME MODELS AND SEALED WINDOW FRAMES, OR GUTTER CAN BE NOTCHED FORWARD 1" TO ALLOW RAG TOP TO BE PUT ON WITHOUT OBSTRUCTIONS. DO NOT TRIM ENDS OFF UNTIL YOU ARE ABSOLUTELY SURE OF WHERE YOU WANT TO TRIM.

10. "Z" STRIP MUST BE NET IN 2 DIRECTIONS AT ONCE, DO NOT TRY TO PREBEND BEFORE YOU PUT IT ON ROOF. YOU MUST BEND PART TOWARDS YOU AND DOWN AT SAME TIME TO CONFORM TO ROOF CURVATURE. DO NOT USE A METAL HAMMER!! IF ABSOLUTELY NECESSARY USE A RUBBER HAMMER, BUT UNLESS THE BEND IS SEVERE, YOU CAN BEND BY HAND. HOLES ARE PREDRILLED. IF YOU NEED MORE HOLES ON ENDS, DRILL AS NECESSARY. WHEN YOU GET TO ENDS JUST BEND TO CONFORM TO ANGLE OF ROOF ON END, TRIM EXCESS.

11. INSTALL 2ND RIVET, BENDING AND SHAPING TO FORM CURVATURE TO PLASTIC BOW, TAKE CARE NOT TO KINK BY BENDING TOO QUICKLY OR TO MUCH IN ONE POINT, APPLY EVEN PRESSURE. INSTALL 3RD RIVET, THEN 4TH, AND SO ON UNTIL BOW IS COMPLETELY BENT AND INSTALLED. NOTE: IT IS VERY IMPORTANT YOU FOLLOW ALTERNATING SIDES AS SHOWN IN ILLUSTRATION TO KEEP STRIP FROM DISTORTING.

12. INSTALL SOFT TOP HOLD-UP BOWS IN NOTCHES IN CENTER SPAN BETWEEN HORIZONTAL ARMS. WITH TOP RAISED TO APPROXIMATE HEIGHT, DRAPE SOFT TOP INTO POSITION, TEMPORARILY TAPING IN PLACE. MEASURE DISTANCE TO FRONT "Z" STRIP, MARK ALONG STRIP TO INDICATE WHERE RUBBER "J" CHANNEL IS ATTACHED. ADJUST HEIGHT OF REAR TELESCOPING TUBE UNTIL TOP IS AT ITS INTENDED HEIGHT, AGAIN TAPE IN PLACE TEMPORARILY.



SEWING ON LEADING EDGE J-HOOK:

13. DUE TO DIFFERENCES IN CUTS FROM TRUCK TO TRUCK, WE ADVISE TAKING TOP AND TRUCK TO TRIM SHOP FOR THIS PORTION OF INSTALL. IT IS ALSO RECOMMENDED THEY MAKE ANY MINOR ADJUSTMENTS NECESSARY. NOTE: THIS NEXT STEP DETERMINES HOW WELL YOUR TOP WILL FIT. WE NO LONGER INSTALL SNAPS TO TOPS AT FACTORY SO YOU MAY POSITION. THEM PRECISELY TO YOUR CUTS. INSTALL SNAP WITH SNAP SETTING TOOL AVAILABLE AT A SEWING STORE OR TRIM SHOP. SNAPS SHOULD BE INSTALLED JUST UNDER REAR CAB WALL COVER. IF NECESSARY TO INSTALL ON WALL COVER, BE SURE ADEQUATE MARINE-TEX EPOXY HAS BEEN USED TO FILL ANY CAVITIES SO SNAP SCREW HAS SOLID AREA TO ATTACH

14. MARK SNAP PLACEMENT ALONG REAR CAB WALL EVENLY EVERY 4" TO 6", DEPENDING ON CAB WIDTH. BE SURE LINE IS PARALLEL TO REAR CAB AND BED LEVEL. AFTER THIS MAKE ADJUSTMENT TO TOP AND FRAME SO TOP IS IN COMPLETE ALIGNMENT.

15. USE CLOTH TOP TO ENSURE HOLES ARE AT PROPER HEIGHT, DRILL 1/16" HOLES WHERE MARKED ON CAB. INSTALL SNAPS USING SMALL-HEADED SHEET METAL SCREWS INTO CAB. MAKE SURE TOP IS IN COMPLETE ALIGMENT, WITH WINDOWS OPENING AND CLOSING FRELY AND ALL SEAMS PROPERLY LINED UP. MAKE ANY ADJUSTMENTS NECESSARY TO FRAME BEFORE SECURING ANYTHING IN PLACE.

DRILLING LOCK HOLES IN TELESCOPING TUBES

16. MAKE SURE TOP IS PROPERLY AND SNUGLY IN POSITION, THEN DRILL 1/4" HOLES THROUGH EXISTING HOLE IN LARGER 7/8" TUBE. INSERT SPRING SNAP, USING FLAT-HEAD SCREW DRIVER TO POSITION. (MORE THAN 1 HOLE IS OK IF NEEDED) INSERT REAR CORNER EXTENTIONS, DRILL 1/4" LOCATOR HOLES (OPTIONAL).

INSTALL SIDE ARM LOCATOR PINS

17. DRILL 1/4" HOLE THROUGH PILLAR POST CAP AND INSERT LOCATOR PIN TO LOCK ARMS IN POSITION.

FINAL CHECK ALL AREAS:

CHECK FOR ANY SHARP EDGES THAT WILL CAUSE PREMATURE WEAR. TRIM METAL IF NECESSARY TO CORRECT, OR INSTALL ADHESIVE FOAM, FRAME AND SOFTTOP CAN NOT FIT ANY BETTER THAN YOUR CUTS ALLOW. THOUGH ADJUSTMENTS CAN BE MADE ON ALMOST ANY PORTION OF FRAME, WHETHER UP, DOWN, IN OR OUT. THIS SHOULD COMPENSATE FOR MOST VARIANCES.

ROOF CUTTING GUIDE

SET COMPASS AND SCRIBE LINES AT CENTER OF ROOF AND CONTINUING TO POINT WINDSHIELD MOULDING STARTS TO CURVE AWAY. SCRIBE SECOND LINE 3/8" BEHIND FIRST LINE. THIS REPRESENTS AMOUNT OF METAL THAT MUST BE REMOVED TO INSTALL.

MEASURE AN EQUAL DISTANCE FROM BACK OF WINDOW FRAMES FORWARD TO INSURE THAT YOUR CUT LINE IS EQUAL ON BOTH SIDES.

NOTE: EFEVTIVE SINCE APRIL 1, 1990 CUT LINE FOR HOTTOP STYLE BOW HAS BEEN CHANGED TO BE SAME AS RATICUL CUT LINE. IF YOU ARE UPGRADING OR REPLACING OLD PARTS ON A HOTTOP OR OTHER STYLE KIT, YOU MAY EXPERIENCE SOME DIFFERENCES IN FIT AND YOU MAY HAVE TO MODIFY METAL ON YOUR TRUCK FOR CORRECT FIT, OR COMPLETE SETS OF PILAR POST AND WINDOW END CAPS CAN BE PURCHASED TO MATCH.

IMPORTANT!! (B) AND (C) MEASUREMENTS WILL EITHER BE ONE OR THE OTHER, MEASUREMENT IS MADE FROM REAR TOP OF DOOR FRAME DOWN FOR MEASUREMENT (B), OR FROM WINDOW SILL METAL UP FOR LOWER REAR WINDOW STUB MEASUREMENT (C).

TRUCK	YEAR	RATICAL OR HOTTOP	FRONT WINDOW FRAME CUT (A)	REAR LOWER WINDOW CUT (B)	WINDOW STUB (C)
TOYOTA TOYOTA TOYOTA TOYOTA DATSUN DATSUN NISSAN NISSAN CHEVY S-10 ISUZU ISUZU ISUZU DOD/MIT DOD/MIT DOD/MIT MAZDA MAZDA FORD GM F/S	1973-1978 1979-1983 1984-1988 1989-1995 1973-1979 1980-1983 1984-1986 1987-1997 1972-1980 1982-1993 1981-1987 1988-1994 1979-1986 1987-1994 1977-1985 1986-1993 1982-1992	4 1/2" 4 1/2" 4 1/2" 4 1/2" 4 1/2" 4 1/2" 4 1/2" 4 .00" 5 3/4" 4 .00" 4 3/4" 4 .00" 4 3/4" 4 .00" 4 3/4" 4 .00" 6 3/4"	16.00" 16 1/2" 15 5/8" 19 1/2" 16 1/2" 16.00" 17.00" 20.00" 20.00" 20 1/2" 17 1/2" 21 3/4" 17.00" 18.00" 16 1/4" 18 1/2" 21 1/4" 21 1/2"	++++ ++++ 19.00" ++++ ++++ 19.1/4" ++++ 19.1/4" ++++ 20.3/4" ++++ ++++ ++++ 17.1/2" 17.3/4"	1.00" 1.00" 1.00" ++++ 1.00" 1.00" 1.00" ++++ 3/8" ++++ 1.00" ++++ 1.00" 2 3/8" 1.5/8" 1.00" ++++
GM F/S COMMANCHE DAKOTA	1988-1994 ALL 1987-1992	4 3/4" 5 1/4" 3 1/2"	22.00" 19 1/4" ++++	22 3/4" ++++ ++++	++++ 1.00" 1/2"

- (A) FROME REAR OF DOOR FRAME FORWARD
- (B) FROM TOP OF DOOR FRAME DOWN
- (C) FROM WINDOW SILL METAL UP
- **) UP FROM TOP OF DOOR HANDLE

THESE CUT LINES ARE GUIDES ONLY AND WE DO NOT GUARANTEE THEIR ACCURACY. IT IS UP TO YOU TO CONFIRM OR CALL US IF YOU ARE NOT SURE OR IF YOU ARE NOT IN AGREEMENT WITH PLACEMENT OF YOUR CUTS. IN ANY CASE. WE ADVISE THAT YOU TAKE YOUR TRUCK TO AN EXPERIENCED INSTALLER.

