

SUPPLEMENTAL DIRECTIONS FOR INSTALLATION OF LETHAL WEAPON 2 TRANNIES #192 & #193 FOR LOSI LXT AND PRO SE

STEP #1 - DRILLING CHASSIS FOR TRANNY

FIRST YOU NEED TO REMOVE OLD TRANNY, REAR SUSPENSION, MOTOR PLATE, REAR SHOCK TOWER AND BULKHEAD FROM YOUR MATRIX CHASSIS SO THAT YOU CAN DRILL SOME MOUNTING HOLES FOR YOUR NEW LETHAL WEAPON 2.

WHEN YOU HAVE THIS DONE, YOU'RE READY TO BOLT DOWN THE DRILL JIG, SUPPLIED WITH YOUR LW 2, TO YOUR CHASSIS. WE SUGGEST YOU DRILL YOUR CHASSIS FOR EITHER LONG WHEEL BASE USE OR SHORT WHEEL BASE, BUT NOT BOTH.

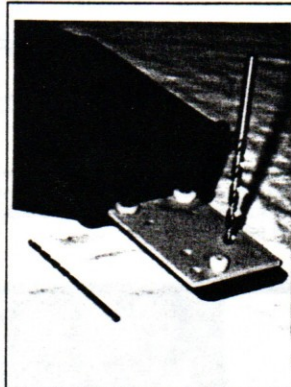
REFER TO FOLLOWING STEPS AND PICTURE 1.

STEP 1-A FOR SHORT WHEEL BASE

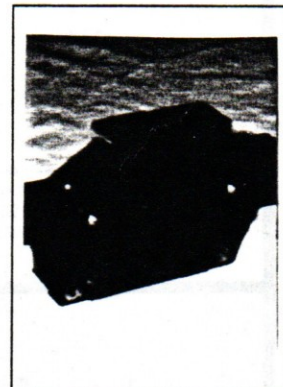
FOR RUNNING VEHICLE WITH SHORT WHEEL BASE, START BY ATTACHING DRILL JIG TO CHASSIS. BY USING THE FORWARD MOTOR PLATE MOUNTING HOLE IN THE CHASSIS AND A STOCK 4-40 FLAT HEAD SCREW AND NUT. THEN WITH TWO STOCK 8-32 FLAT SCREWS AND NUTS SECURE THE FRONT OF JIG TO CHASSIS THROUGH THE TWO MOST FORWARD BULKHEAD MOUNTING HOLES. NOW DRILL THE TWO FRONT SMALLER HOLES FOR TRANNY USING A 1/8" DRILL AND THE TWO REAR HOLES USING A # 22 DRILL OR A 5/32" DRILL (WITH THE 5/32" DRILL THE SCREWS MAY BE A LITTLE TIGHT). THEN COUNTERSINK THE HOLES ON THE BOTTOM SIDE OF CHASSIS TO MATCH THOSE OF THE STOCK HOLES. USE A COUNTERSINK, AND NOT A DRILL BIT WHICH COULD DIG INTO CHASSIS AND RUIN IT.

STEP 1-B FOR LONG WHEEL BASE

FOR RUNNING VEHICLE WITH LONG WHEEL BASE, START BY ATTACHING DRILL JIG TO CHASSIS USING THE REAR MOTOR PLATE HOLE AND A STOCK 4-40 FLAT HEAD SCREW AND NUT. THEN WITH TWO STOCK 8-32 FLAT SCREWS AND NUTS SECURE THE FRONT OF JIG TO CHASSIS THROUGH THE TWO REAR BULKHEAD MOUNTING HOLES, THE SECOND SET OF HOLES BACK FROM THE FRONT. NOW DRILL THE TWO FRONT HOLES FOR TRANNY USING A 1/8" DRILL AND THE TWO REAR HOLES USING A # 22 DRILL OR A 5/32" DRILL (WITH THE 5/32" DRILL THE SCREWS MAY BE A LITTLE TIGHT). **NOW UNLIKE STEP 1 A** YOU NEED TO ALSO DRILL THE TWO LARGE HOLES AT THE OUTSIDE REAR CORNERS OF THE DRILL JIG. USE THE SAME DRILL BIT THAT YOU USED FOR THE TWO REAR TRANNY HOLES, THESE ARE FOR THE REAR SUSPENSION MOUNTING BULK. THEN COUNTERSINK THE HOLES ON THE BOTTOM SIDE OF CHASSIS TO MATCH THOSE OF THE STOCK HOLES. USE A COUNTERSINK, AND NOT A DRILL BIT WHICH COULD DIG INTO CHASSIS AND RUIN IT.



PICTURE #1



PICTURE #2

STEP #2 MODIFYING SOME STOCK PARTS REFERRING TO FIGURE #1 & PICTURE #2

#1 FIRST YOU NEED TO MODIFY THE BACKSIDE OF THE REAR BULKHEAD AS WELL AS THE REAR SUSPENSION MOUNTING BAR. YOU NEED TO TRIM THE FLAT "L" PIECE THAT GOES UNDER STOCK TRANNY OFF. SO THAT THE BACK OF THE BULKHEAD IS FLAT ON THE BACK SIDE. (SEE PICTURE # 2) THIS IS NECESSARY BECAUSE THE LETHAL WEAPON 2 CASE NEEDS TO SIT FLAT ON CHASSIS AND NOT UP ON THE EARS. A HACKSAW CUT FOLLOWED BY A EX-ACTO KNIFE TRIMS THE EASIEST METHOD FOR THE HOME HOBBYIST. A SHOP SANDING DISK IS FASTER AND EASIER, BUT MORE HAZARDOUS TO THE HOBBYIST, SO BE CAREFUL.

#2 REFERRING TO FIGURE 1 BELOW. THE REAR SUSPENSION MOUNTING BAR NEEDS TO BE NOTICED ON THE BACKSIDE TO FIT AROUND THE REAR OF THE TRANNY CASE. ON THE BACK SIDE - BECAUSE, YOU ARE GOING TO MOUNT IT ON THE CHASSIS BACKWARDS WITH THE LETHAL WEAPON 2. AGAIN THIS IS BECAUSE THE TRANNY CASE IS MADE TO MOUNT FLAT ON THE CHASSIS AND NOT ON TOP OF THIS PART. USE A COURSE FILE, OR A GRINDER WORKS GREAT, BUT AGAIN BE CAREFUL A GRINDER TAKES A LOT FAST.

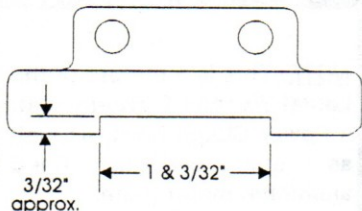
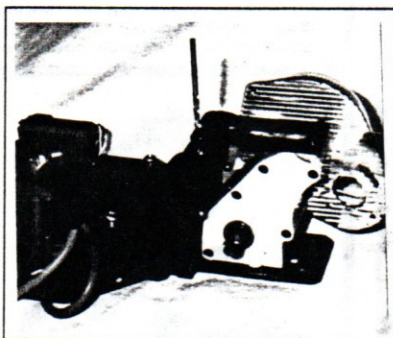


FIGURE #1



PICTURE #3

STEP #3 START REASSEMBLING & DRILL REAR BULKHEAD

NOW MOUNT YOUR REAR BULKHEAD " WITH SHOCK TOWER OFF IT ", AND ASSEMBLED LETHAL WEAPON 2 TO YOUR CHASSIS. USE THE SUPPLIED 4-40 X 3/8" AND 8-32 X 3/8" FLAT HEAD SCREWS FOR TRANNY. NEXT MOUNT THE "TRANNY TO BULKHEAD BRACE" TO THE TOP OF TRANNY, USING SUPPLIED 4-40 X 1/4" SOCKET HEAD SCREWS. NOW USING IT AS DRILL JIG, DRILL TWO 3/32" HOLES IN THE TOP OF YOUR BULK HEAD.

THEN USE TWO THE SUPPLIED 4-40 x 1/2" SOCKET HEAD SCREWS AND SPACERS, PACKAGED TOGETHER, TO ATTACH BRACE TO BULKHEAD. YOU ARE NOW READY TO MOUNT SUSPENSION ARMS, REMEMBER THE REAR MOUNTING BAR GOES ON BACKWARDS NOW, **WHICH ALSO MEANS THAT** YOU NEED TO USE THE SUPPLIED 4 MM X 10 MM FLAT HEAD PHILLIPS SCREWS AND 4 MM NUTS TO SECURE THE BAR TO THE CHASSIS. USE SOME LOCK TIGHT ON THE SCREW TO INSURE THE NUTS DO NOT FALL OFF. AT THIS TIME YOU CAN ALSO REMOUNT THE SHOCK TOWER. REFER TO PICTURE #3

STEP #4 ASSEMBLING A&L'S DOG BONES TO LOSI AXLES

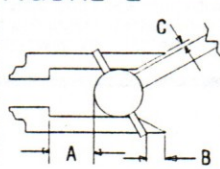
START BY DISASSEMBLING YOU STOCK AXLE FROM THE SLIDER SHAFT HALF. THEN PUT THE SUPPLIED WHITE YOKE ONTO THE DOG BONE USING THE FLAT HEAD SCREWS AND SET SCREWS PACKAGED WITH THEM. CAREFULLY STRETCH THE WHITE YOKE OVER THE STOCK LOSI STEEL BALL & PIN. OUR YOKES ARE STIFFER THEN THE STOCK LOSI YOKES, THEY LAST A LONGER, BUT ARE HARDER TO INSTALL, SO BE CARE SO YOU DO NOT BRAKE OFF THE EAR!

STEP #5 INSTALLING YOUR NEW UNIVERSALS INTO THE HUB CARRIERS

TO START PUT 7 OF THE SUPPLIED .010" SHIMS ON THE AXLE FIRST, THEN PUT AXLE THROUGH BEARINGS INTO HUB. PUT 2 MORE SHIMS ON THE OUT SIDE BEFORE PUTTING IN THE STOCK DRIVE PIN. PUT DOG BONE INTO OUT DRIVE OF TRANNY AND ATTACH TOP LINK OF SUSPENSION. DO THE SAME FOR BOTH SIDES. REFER TO FIGURE 2 FOR LIMITING YOUR SHOCKS TO KEEP DOG BONE FROM FALLING OUT OF DRIVE CUPS OF DIFF.

REFER TO FIGURE #2 - TO DETERMINE IF YOU NEED TO LIMIT THE UP TRAVEL (BY PUTTING LIMITERS ON SHOCK SHAFT OUTSIDE OF SHOCK) OR THE DOWN TRAVEL OF SHOCK (BY PUTTING THEM INSIDE OF SHOCK) SO THAT THE DOG BONE WILL NOT GET PULLED OUT OF DIFF OUT DRIVES. AS YOU MOVE THE POINTS AT WHICH SHOCK IS ATTACHED TO SHOCK TOWER OR SUSPENSION ARM YOU MAY HAVE TO CHANGE THE WAY THE SHOCKS ARE LIMITED TO KEEP DOG BONES IN DIFF.

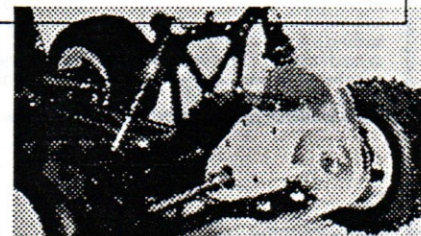
FIGURE -2



MINIMUM CLEARANCES FOR PROPER RUNNING OF DOG BONES:

A: MIN. OF .015" B: MIN. OF .015"

C: MIN. OF .015"



YOU'RE NOW READY TO GO RACING - AND START WINNING EVEN MORE!!

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