### E.A.R. SERIES TUNING

The E.A.R. series combines an efficient reverse flow core with the tunable diffuser disc outlet. For stock engines and jetting, 5 to 6 discs is ideal. Unlike the Racing series, the core itself does provide some back-pressure that cannot be eliminated simply by adding discs. For this reason, 8 to 10 discs is the practical maximum that should be used. In other words, adding more discs will not reduce the overall back-pressure any further.

#### REPACKING

- 1. Remove Silencer.
- 2. For Racing series only, remove all discs and reassemble with aluminum end cap only (screws finger tight).
- 3. Using a 1-1/2" dia. wooden dowel approximately 15" long (flat on the end, not rounded), insert into silencer against back of end cap and carefully knock out core from aluminum housing. For E.A.R. series cores, the dowel will bottom-out against the reverse flow baffle instead of the end cap.
- 4. Repack core with Repack Kit, Part No. 400-4020.
- 5. Reassemble silencer. Remember use High-Temp Lube on threads.

# CLEANING

Soapy water and a soft cloth should be used to clean pipe and aluminum silencer. Use a fine Scotch-Brite pad to remove exhaust deposits from the end cap and to touch-up the silencer body. The diffuser discs should be removed and cleaned periodically. Oven cleaner is recommended to remove baked-on oil or carbon deposits.

ACCESSORIES AND REPLACEMENT PARTS	PART NO	).
Diffuser Disc 6-Pack	404-650	16
Diffuser Disc 12-Pack	404-651	2
Stainless Steel Bolt 6-Pack (with High-Temp Lube)	404-720	6
High-Temp Lube 3-Pack	090-262	2
Aluminum End Cap (with Blank Disc)	402-304	6
Open End Cap (Closed-Course-Competition Only)	405-304	6
Exhaust Shield (Protects 120 degrees)	405-212	20
Fiberglass Repack Kit	400-402	0
Racing Series Core (1.75" inlet, Includes Fiberglass)	400-817	70
E.A.R. Series Core (1.75" inlet, Includes Fiberglass)	401-817	70

# SUPERTRAPP E.A.R. SERIES and DIRT RACING SERIES

# KAWASAKI

KLR600/650 & TENGAI 1984-93

PART NO'S. 811-6600 (E.A.R.)/813-6600 (RACING)



Since 1975, SuperTrapp has built its reputation on innovation and technical superiority. SuperTrapp R&D is constantly designing, testing and improving--providing you with the latest in state-of-the-art performance engineering. The SuperTrapp E.A.R. series and Dirt Racing series are absolutely the best bolt-on performance items available anywhere.

SUPERTRAPP INDUSTRIES, INC.

# STOCK SYSTEM REMOVAL

- Loosen headpipe flange nuts.
- 2. Remove right plastic side panel.
- 3. Remove stock muffler and gasket.

# SUPERTRAPP INSTALLATION

- Install SuperTrapp inlet pipe using smaller T-bolt clamp supplied. DO NOT TIGHTEN.
- Slide larger T-bolt clamp over silencer inlet and slide onto inlet pipe. DO NOT TIGHTEN.
- 3. Adjust inlet pipe so there is a minimum of 1/8" clearance from frame.
- On KLR600 only, install stock rear mounting bolt loosely with flat washer supplied into rear stock mount.
- On KLR650 and TENGAI, use the spacer tube supplied between bracket and frame to space silencer away from fender. A longer 8mm bolt is included. Exhaust Shield part no. 405-2120 is available to keep heat and soot off fender.
- First snug all clamps and mounting bolts but do not tighten. Make sure there is no binding then tighten, starting at the headpipe flange nuts and working rearward.
- 7. Loosen silencer to inlet pipe clamp and install "Retaining Pin" (see supplemental instructions). Tighten clamp.

#### SILENCER ASSEMBLY

When assembling or changing diffuser discs, apply a small amount of High-Temp Lube (supplied) to the threads of each screw. Note: the blank disc (without center hole) MUST be placed against the end cap. This is a non-functioning disc that insulates the aluminum end cap from extreme temperatures.

Be sure to install discs so that they fit into the contour of the silencer core cap. Their outlets should angle toward the aluminum end cap.

Tighten screws, using hex key provided, in a cross-pattern until snug. The screws provided will hold up to 20 discs.

#### **GENERAL TUNING**

SuperTrapp exhaust systems are uniquely tuneable. Back-pressure and noise level are controlled by the number of discs used.

NOTE: increasing the number of discs creates a larger exhaust outlet area and, therefore, causes less back-pressure but more noise. Conversely, removing discs increases back-pressure but reduces sound level. Also, richer jetting will be required as discs are added to match the improved air flow.

All SuperTrapps are U.S. Forest Service Approved Spark Arrestors and are legal regardless of the number of discs installed providing the closed end cap is used. The optional Open End Cap is designed for Closed-Course-Competition only and will void the spark arrestor function.

All systems are supplied with 8 discs (plus one blank disc described above) to provide a range of tunability. Additional discs are available in 6 or 12-packs.

#### E.A.R. SERIES VERSUS RACING SERIES

The E.A.R. or Environmental Acoustic Reduction series is designed to achieve significant performance increases while retaining near stock noise levels. For stock and mildly modified engines, the E.A.R. series will offer the same performance advantage as the Racing series but with significantly lower sound.

The Racing series is designed for Closed-Course -Competition use only. It will not meet the necessary sound regulations for street or trail use. Also, there is no performance advantage in using the Racing series over the E.A.R. series except with highly modified engines that can take advantage of the improved flow.

Replacement cores are available to convert from Racing to E.A.R. or E.A.R. to Racing series. See Accessories and Replacement Parts.

# **RACING SERIES TUNING**

The Racing series uses a straight through perforated core. Back-pressure is controlled entirely by the discs since the core itself adds no back-pressure. This gives almost infinite tunability to match any degree of engine modification. 4 to 5 discs will work best on a stock engine with stock jetting. However, the E.A.R. core is recommended in this application. Depending on modifications such as a big bore kit, carburetor/air box alterations, and cam changes, up to 20 discs may be required for optimum performance.