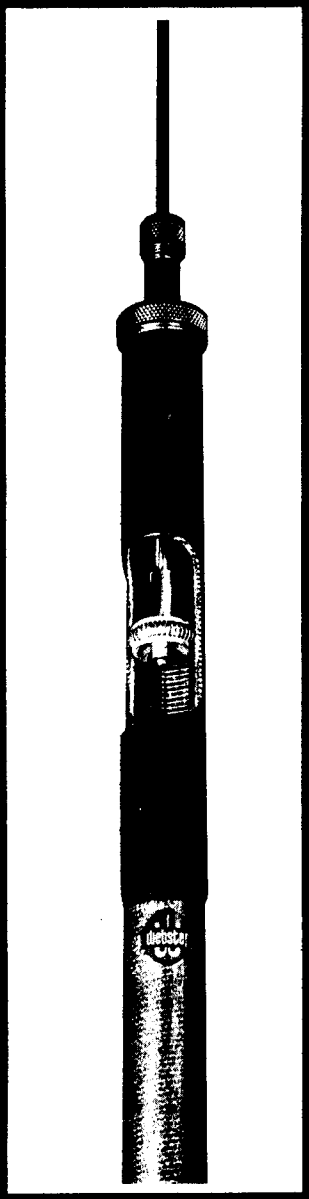
BAND-SPANNER

MOBILE ANTENNA

MODEL
A-61
A-62



One antenna... 5-band operation... designed for the mobile amateur. Covers 75-40-20-15-10 meter bands* with no external taps or projections... no plug-in coils!

Band change is simple. The top whip is merely raised or lowered to a pre-calibrated setting corresponding to selected band.

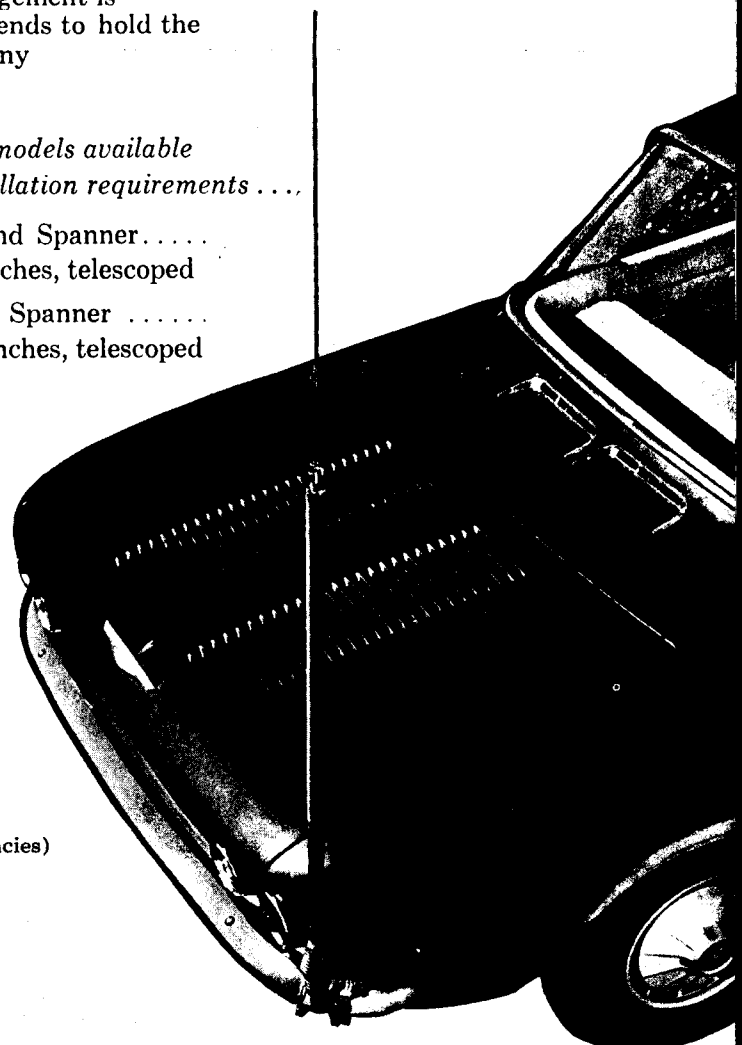
The Webster "Band Spanner" is a center-loaded antenna with loading coil wound directly on the fiber glass support column. This unique Webster design allows a portion of each coil turn to be internally exposed. A top whip of fixed length is arranged to push down or pull up from the inside of the loading section (see view to left). The whip has a circular contactor affixed to its lower end for positive electrical connection between the bottom end of the whip and the internally-exposed loading coil turns. Raising or lowering the whip, plunger fashion, causes it to be "tapped" on any desired portion of the loading inductor. This type of continuous adjustment of the loading inductor permits exact antenna resonance to be achieved anywhere within a given band—minimizes loading problems . . . assures most efficient operation.

The contact arrangement is self-cleaning . . . tends to hold the whip firmly into any pre-set position.

Two streamlined models available for your installation requirements . . .

A-61 Regular Band Spanner. . . . . 63 inches, telescoped

A-62 Short Band Spanner . . . . . 60 inches, telescoped



Easily handles transceivers with power inputs of 100 watts or more; Collins KWM-2, Gonset G-76 among others.

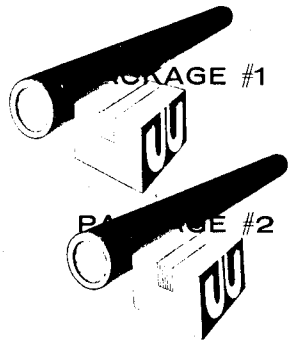
* (and MARS frequencies)

WEBSTER ANTENNAS—WORLDWIDE STANDARD OF COMPARISON

Webster band-spanner.

317 ROEBLING ROAD, SOUTH SAN FRANCISCO, CALIFORNIA

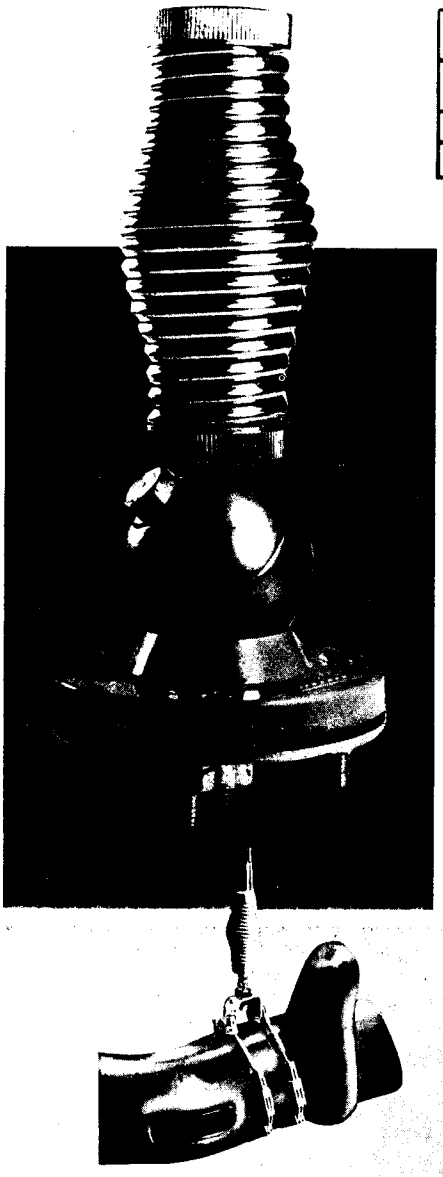
TWO COMPLETE ANTENNA PACKAGES:



Band-spanner (regular or short) complete with H-200 universal ball mount and H-205 heavy duty spring . . .

Band-spanner (regular or short) complete with H-203 bumper mount and H-205 heavy duty spring . . .

ANTENNA SPECIFICATIONS:



	Short	Regular
Overall height (whip fully extended)	93 inches	117 inches
Height support column (minimum height)	60 inches	63 inches
Support column diameter	1 inch	1 inch
Adjustable range of whip	24 inches	24 inches

Stainless steel whip is ¼ inch at base tapering to ⅛ inch at corona ball. Mounting stud is ⅜-24 thread, ½ inch in length.

MODEL H-206 SPRING: Heavy duty cadmium plated spring, threaded ⅜-24 (F), supplied with male adaptor fitting. Hex end caps for side wrench tightening. For use with Band-spanner and similar antennas.

MODEL H-208 SPRING: Similar to H-206 except has coarse knurled end caps.

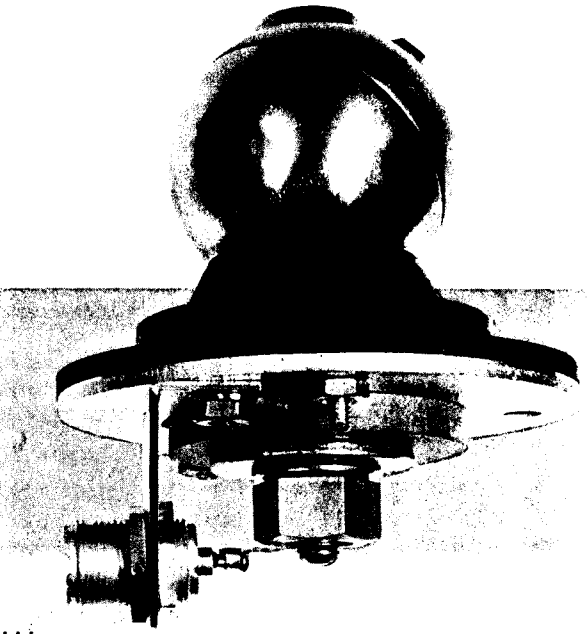
MODEL H-200 BALL MOUNT: Heavy-duty, universal, for ⅜-24 whip and antenna fittings. Durable Phenolic insulator. Split ball is of natural aluminum.

MODEL H-202 BALL MOUNT: Similar to H-200 except entirely chrome plated. Handsome.

MODEL H-203 BUMPER MOUNT: Heavy duty double-chain mount, adjustable to all popular sized bumpers. ⅜-24 threaded socket will accept antenna or coil spring.

MODEL H-210 SINGLE-HOLE BALL MOUNT: New universal ball mount requires only a single mounting hole in vehicle body. Consists of chrome plated aluminum split-ball assembly with insulated base and through-collar of heavy-duty tenite, is reinforced on inside of vehicle body with heavy gage metal plate which also supports a right-angle coax connector. Plate has pointed set screws to assure positive grounding. Split ball is threaded ⅜-24. Mounting hole diameter, 1⅛".

COAX ADAPTOR KIT: Sturdy right-angle bracket and coax connector assembly. Bracket drilling matches standard base plates used on all WEBSTER and other standard mounts. Available separately.



Webster band-spanner.

OTHER WEBSTER PRODUCTS...

Citizens Band Antennas Marine antennas and mounts Mobile antennas

317 ROEBLING ROAD
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62-W-103 LITHO IN U.S.A.

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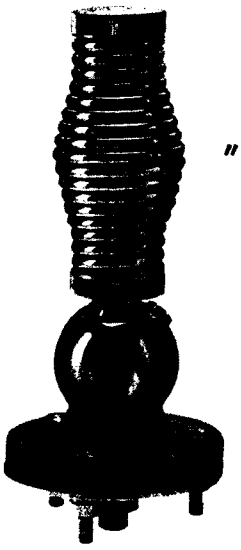
TWO COMPLETE ANTENNA "PACKAGES"

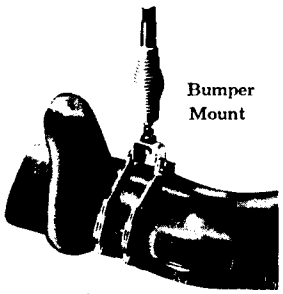


"Ball Type" Mount

PACKAGE No. HA-17

Band-spanner Model A-62 (short) complete with universal "ball type" antenna mount and heavy-duty spring. Features durable phenolic insulator with hardened, socket-head screw for adjusting antenna mounting position, and heavy chrome plated, split aluminum ball. All hardware is plated. Supplied with mounting screws, solder lugs and locating template. The heavy-duty cadmium plated supporting spring has center conductor for electrical conductivity. Includes 3/8-24 male and female threaded connectors at opposite end of spring, with hexagonal endcaps to fasten entire assembly securely.

Priced at $46.85



Bumper Mount

PACKAGE No. HA-15

Band-spanner Model A-61 (long) complete with bumper mount and heavy duty cadmium plated supporting spring. Adjustable to all popular sized bumpers, and includes 3/8-24 threaded socket which will accept antenna or coil spring. Easily attached in minutes.

Priced at $47.40

webster MANUFACTURING

317 ROEBLING ROAD,
SOUTH SAN FRANCISCO, CALIFORNIA

Recd Apr 2/64

(1)

WEBSTER BAND SPANNER

OPERATING INSTRUCTIONS

FREQUENCY COVERAGE

Your Band Spanner antenna is of the center-loaded solenoid type and is capable of providing quarter-wave electrical resonance on the 75, 40, 20, 15 and 10 meter amateur bands. It will also operate effectively on the 11 meter Citizens Band. This antenna is designed to operate against ground (car body), and requires no supplemental loading inductor at its base.

Band Spanner is necessarily a high-Q antenna (as all good antennas of its general type must be), and will therefore show a resonance point that is rather sharply defined. In contrast, an inefficient antenna is normally indicated when the tuning characteristic is broad and sluggish.

CONSTRUCTIONAL DETAILS

The loading section is wound directly on the fiberglass support column and is protected against moisture and abrasion by an outer jacket of durable epoxy material. The fiberglass column is slotted in such a manner that a portion of each loading coil turn is exposed within the hollow fiberglass interior.

The stainless steel whip is maintained coaxial with the loading section by a top compression fitting. In addition, the whip has a circular self-centering contact firmly secured to its lower end. Any turn of the loading section may be contacted by raising or lowering the whip plunger-fashion. The interior whip contact is independent of whip rotation.

As a matter of preventive maintenance the whip should occasionally be moved in and out so as to pass over all turns in the loading section. This will serve to remove any oxide which might form on portions of the coil which are infrequently used.

62-W-108 LITHO U.S.A.

RELEASING AND LOCKING THE TOP WHIP

The top whip may be locked into position by tightening the compression fitting on the top of the loading section. The whip may be telescoped into the fiberglass support column as a convenience for storage or for clearance. To prevent moisture from entering directly into the loading section and support column, if the antenna is exposed to weather when in this telescoped condition, a small plastic bag (or other cover) should be slipped over the exposed end.

BAND CHANGE

The stainless top whip in each Band Spanner has permanent markings which correspond to 75, 40, 20, 15 and 10 meter amateur bands. Because these markings are not specifically labeled as to band, it will be necessary to remember that the mark nearest the top of the whip corresponds to the highest frequency, i.e., 10 meters. It will be apparent that the mark at the other extreme represents the lowest frequency band (75 meters). Stating this another way: The greatest length of whip will be exposed for the lowest frequency . . . the least whip for the highest frequency.

APPROXIMATE FREQUENCY OF MARKINGS

The actual frequency of the markings will be somewhat dependent upon the particular Band Spanner installation including the length of the lead (if any), from antenna base to antenna relay.
Speaking generally, the factory markings correspond to *mid-band* frequencies except on the lowest band where the marking is at the high end of the phone band (4 kilocycles).

ANTENNA LOADING

Considerable material on antenna loading which is applicable to Band Spanner is contained in the booklet, "Mobile Antennas . . . Simple Steps to Peak Performance," published by Webster Manufacturing. This booklet is available upon request.

"BAND HOPPING"

While Band Spanner will provide optimum performance on all five amateur bands (75, 40, 20, 15 and 10 meters), frequent change from one band to another can pose problems in obtaining uniform loading. This may be particularly evident when the mobile transmitter output is a pi network. The

following suggestion is offered as proving very successful for a considerable number of Band Spanner users:

(1)—Base of antenna is connected to transmitter output with a special coax matching section. Outer sheath of coax is bonded to car frame.

(2)—Coax matching section—Type RG8/U, 52 ohm coax, 21 feet in length.

(3)—Loading procedure: (a)—Set top whip of Band Spanner to marking for desired band. Turn on transmitter and check loading. If pi network output, follow normal procedure of setting load capacitor and establishing "dip" with resonating capacitor. (b)—Assuming that loading is insufficient at any combination of pi network settings, proceed as follows: Pull out top whip one turn (indicated by a slight "click" . . . you can really "feel" the interior whip contact pass over the individual coil turns). Recheck transmitter to see whether loading has increased or decreased. If loading *decreases* with the whip pulled out, return to original setting and try one "click" with the whip pushed in. The point here is to establish which direction (if any) the whip must be moved from factory calibration marking, "in" or "out", to enable the particular transmitter to load fully. It is suggested that a new mark be established on the top whip so that the whip can be set instantly for subsequent operation on this same band.

MODELS AVAILABLE

Two Band-spanner models are currently available:
Model A-62 *Short* Band-spanner, 60″ telescoped, 93″ extended.
Model A-61 *Long* Band-spanner, 63″ telescoped, 117″ extended.
Either model (less mount) $27.50

BAND SPANNER MAINTENANCE KIT

The handy Band Spanner Maintenance Kit, at a list price of $3.00, includes the following:

Part #101	1 Spacer Washer
#132	1 Contact Spring
#126	1 Split Bushing
#133	2 Neoprene Washers
#174	1 Corona Ball
#304	1 Brass Washer