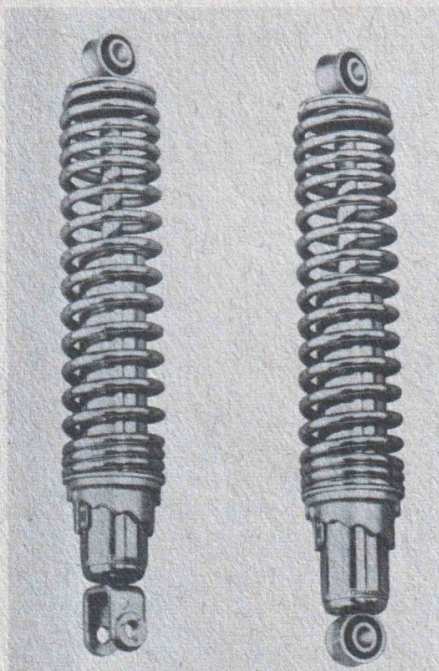
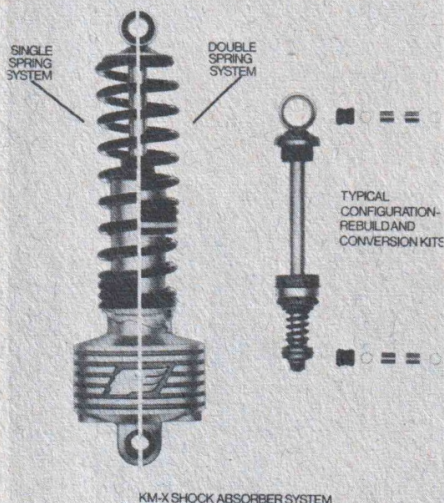


RED WING



Red Wing KM-X Shock Absorber and rebuild kit.



Red Wing ROCU heavy duty shock absorbers.

RED WING ROCU KM-X SERIES REBUILD INSTRUCTIONS

1. Remove and discard all old eye bushings and spacers.
2. Place the ROCU lower eye in a vise.
 - A. Pry the rubber bumper down the shaft about one inch, with the aid of a small screwdriver.
 - B. Position the pre-load adjuster to its lowest setting.
 - C. Depress the spring and remove the quick clip. Several good spring depressors are available and it is recommended they be used. However, you may depress the spring by using a pair of long shaft screwdrivers

inserted in the coils. Be extremely careful! Exercise caution: Do not grip the spring while being depressed and remove the quick clip with pliers.

3. Remove the spring and the spring pre-load adjuster.
4. With the Red Wing rebuild tool part no. 12-0900, available from your dealer, remove the packing nut from the inner cylinder. This nut is very tight and will require a good deal of effort to loosen.
5. You may now remove the complete piston rod assembly and discard it.
6. Remove the inner cylinder from the outer body. The base valve should come out at the same time as the inner cylinder. If not, use caution when dumping the old fluid, so as not to lose the base valve.
7. Inspect the inner cylinder at this time for score marks or excessive wear, and if bad, replace it with a new inner cylinder.
8. Clean the outer body, inner cylinder and the new piston rod assembly (if possible, in a wash tank) and wipe clean with a lint free rag.

9. Install the base valve in the inner cylinder and place this assembly in the outer body.
10. Refill with the correct amount of hydraulic fluid as indicated in the table below. Do not use the old fluid.

ROCU	CC	FL. OZ.
KM-X300	136	4.53
KM-X320	139	4.63
KM-X330	142	4.73
KM-X340	148	4.93
KM-X360	157	5.25

Fill the inner cylinder and insert the new piston rod assembly slowly. Push the piston rod down only far enough to screw in the packing case flush with the top of the outer body. The recommended torque is 300/390 in.-lbs., which is tight.

11. Reassemble the spring system in the reverse order of removal, again taking due caution when installing the spring clip to prevent pinching any fingers between the spring and the quick clip.

12. Insert new rubber bushings. Select the proper new steel bushings and insert them into the rubber bushings.

REBUILDING INSTRUCTIONS FOR RED WING ROCU KM SERIES

1. Remove and discard all top and bottom eye bushings and spacers.
2. Place the lower mounting eye of the ROCU in a vise, clamping firmly.

A. Using a small screwdriver, slide the rubber bumper about halfway down the shaft.

B. Check spring preload adjuster and turn counter-clockwise as far as it will go. (The spring now has the lowest pre-load and will be easier to remove.)

C. Depress the spring using a "Vise-Grip" type spring depressor and remove the quick clip. If a spring depressor is not available, have someone assist you by removing the quick clip as you depress the spring using both hands.

3. Remove the spring, lower locating ring, and spring pre-load adjuster.

4. Unscrew the packing nut using a Red Wing rebuild tool Part No. 12-0900 available through your Red Wing dealer, or equivalent tool, such as an adjustable face spanner.

5. The complete piston rod assembly may now be removed and discarded.

6. Remove the ROCU from the vise and pour out the used hydraulic fluid. Remove the inner cylinder and base valve assembly. Examine the inside surface of the cylinder, and if worn or scored, replace. Clean inside of shock absorber with new fluid and a clean, lint-free cloth.

7. Insert the base valve assembly in the inner cylinder and place this in the outer shell.

8. Refill your shock absorber with the correct amount of hydraulic fluid from the chart below. It is recommended that you always use new hydraulic fluid for the refill, as the original fluid may be unusable. It is preferable to use a temperature stable fluid.

SHOCK ABSORBER	CC	FL. OZ.
KM-S300	85cc	2.87
KM-S310	83.5cc	2.82
KM-S320	90.5cc	3.06
KM-S330	89cc	3.0
KM-S340	92cc	3.11
KM-C300	77cc	2.60
KM-C310	80cc	2.70
KM-C320	83cc	2.80
KM-C330	85.5cc	2.89
KM-C340	88.5cc	3.0

Fill the inner cylinder and insert the new piston rod assembly slowly. Push the piston rod down only far enough to screw in the packing case flush with top of outer shell. Do not overtighten. (Recommended torque is 300-390 in. lbs.)

9. You are now ready to reassemble the spring system in the following order:

- A. Spring Pre-load Adjuster in a Full Counter Clockwise Position.
- B. Spring Locating Ring.
- C. Spring (Small Diameter Up)
- D. Spring Quick Clip.

10. Insert new rubber bushings. Select proper steel bushings, the same size as discarded (10mm or 12mm).

RED WING SPRINGS ADAPT TO THESE SHOCK ABSORBER MODELS:

BETOR

To mount Red Wing springs, discard Betor clip and spring end caps. Use Red Wing upper spring clip no. 12-0140 and Red Wing lower spring guide no. 12-0150.*

MODEL	SPRING RATE	FREE LENGTH	COLOR** CODE	RED WING SPRING
All	60/90	8 1/4"	Blue	CCS/CRS-R1
EX Series	70/100	8 1/4"	White	CCS/CRS-O1
	80/110	8 1/4"	Yellow	CCS/CRS-C1
	90/110	8 1/4"	Red	CCS/CRS-U1
All	60/90	9 3/4"	Blue	CCS/CRS-R2
M Series	70/100	9 3/4"	White	CCS/CRS-O2
	80/110	9 3/4"	Yellow	CCS/CRS-C2
	90/110	9 3/4"	Red	CCS/CRS-U2
	100	9 3/8"	Green	CCS/CRS-X2
	120	9 3/8"	Grey	CCS/CRS-Y2
	145	9 3/8"	Silver	CCS/CRS-Z2

BOGE

Use Red Wing lower spring guide 12-0150
Use Boge upper spring clip 12-0140

MX-1075	60/90	9 3/4"	Blue	CCS/CRS-R2
	70/100	9 3/4"	White	CCS/CRS-O2
	80/110	9 3/4"	Yellow	CCS/CRS-C2
	90/110	9 3/4"	Red	CCS/CRS-U2
MX-1175	(SAME AS MX-1075)			
MX-1225	60/90	9 3/4"	Blue	CCS/CRS-R2
	70/100	9 3/4"	White	CCS/CRS-O2
	80/110	9 3/4"	Yellow	CCS/CRS-C2
	90/110	9 3/4"	Red	CCS/CRS-U2
	100	9 3/8"	Green	CCS/CRS-X2
	120	9 3/8"	Grey	CCS/CRS-Y2
	145	9 3/8"	Silver	CCS/CRS-Z2
MX-1300	(SAME AS MX-1225)			
MX-1350	(SAME AS MX-1225)			
SS-1175	(SAME AS MX-1075)			
SS-1225	(SAME AS MX-1225)			
SS-1300	(SAME AS MX-1225)			
SS-1350	(SAME AS MX-1225)			
SS-13310	(SAME AS MX-1225)			
SS-13010	(SAME AS MX-1225)			
SS-13308	(SAME AS MX-1225)			

KONI

—Use Red Wing lower spring guide
Use Koni upper spring clip

MODEL	SPRING RATE	FREE LENGTH	COLOR CODE	RED WING SPRING
76F-1250	60/90	9 3/4"	Blue	CCS/CRS-R2
	70/100	9 3/4"	White	CCS/CRS-O2
	80/110	9 3/4"	Yellow	CCS/CRS-C2
	90/110	9 3/4"	Red	CCS/CRS-U2
	100	9 3/8"	Green	CCS/CRS-X2
	120	9 3/8"	Grey	CCS/CRS-Y2
	145	9 3/8"	Silver	CCS/CRS-Z2
76F-1277	(SAME AS 76F-1250)			
76F-1282	(SAME AS 76F-1250)			
76F-1283	60/90	9 3/4"	Blue	CCS/CRS-R2
	70/100	9 3/4"	White	CCS/CRS-O2
	80/110	9 3/4"	Yellow	CCS/CRS-C2
	90/110	9 3/4"	Red	CCS/CRS-U2
	100	9 3/8"	Green	CCS/CRS-X2
	120	9 3/8"	Grey	CCS/CRS-Y2
	145	9 3/8"	Silver	CCS/CRS-Z2
76F-1296	(SAME AS 76F-1250)			
76F-1287	60/90	9 3/4"	Blue	CCS/CRS-R2
(Note: Do Not	70/100	9 3/4"	White	CCS/CRS-O2
Use In Lowest Pre	80/110	9 3/4"	Yellow	CCS/CRS-C2
Load Setting)	90/110	9 3/4"	Red	CCS/CRS-U2
76F-1302	60/90	8 1/4"	Blue	CCS/CRS-R1
	70/100	8 1/4"	White	CCS/CRS-O1
	80/110	8 1/4"	Yellow	CCS/CRS-C1
	90/110	8 1/4"	Red	CCS/CRS-U1
76F-1307	60/90	8 1/4"	Blue	CCS/CRS-R1
	70/100	8 1/4"	White	CCS/CRS-O1
	80/110	8 1/4"	Yellow	CCS/CRS-C1
	90/110	8 1/4"	Red	CCS/CRS-U1
	100	7 7/8"	Green	CCS/CRS-X1
	120	7 7/8"	Grey	CCS/CRS-Y1
	145	7 7/8"	Silver	CCS/CRS-Z1
76F-1322	(SAME AS 76F-1307)			
76K-1314	100	7 1/4"	Green	JOS-SO
	120	7 1/4"	Grey	JOS-TO
	145	7 1/4"	Silver	JOS-UO
76K-1343	(SAME AS 76F-1250)			

GIRLING

- Discard chrome spring cover where used.
- Use Red Wing lower spring guide 12-0150
- Use Red Wing upper spring guide 12-0140 in addition to normal Girling clips.

MODEL	SPRING RATE	FREE LENGTH	COLOR CODE	RED WING SPRING
2042	60/90	8 1/4"	Blue	CCS/CRS-R1
	70/100	8 1/4"	White	CCS/CRS-O1
	80/100	8 1/4"	Yellow	CCS/CRS-C1
	90/100	8 1/4"	Red	CCS/CRS-U1
2059	(SAME AS 2042)			
2029	(SAME AS 2042)			
2328	(SAME AS 2042)			
2334	60/90	9 3/4"	Blue	CCS/CRS-R2
	70/100	9 3/4"	White	CCS/CRS-O2
	80/110	9 3/4"	Yellow	CCS/CRS-C2
	90/110	9 3/4"	Red	CCS/CRS-U2
	100	9 3/8"	Green	CCS/CRS-X2
	120	9 3/8"	Grey	CCS/CRS-Y2
	145	9 3/8"	Silver	CCS/CRS-Z2

MODEL	SPRING RATE	FREE LENGTH	COLOR CODE	RED WING SPRING
2452	(SAME AS 2042)			
2480	(SAME AS 2042)			
2487	(SAME AS 2334)			
2527	(SAME AS 2042)			
2528	(SAME AS 2042)			
2531	(SAME AS 2042)			
2535	(SAME AS 2334)			
4475	60/90	9 3/4"	Blue	CCS/CRS-R2
	70/100	9 3/4"	White	CCS/CRS-O2
	80/110	9 3/4"	Yellow	CCS/CRS-C2
	90/110	9 3/4"	Red	CCS/CRS-U2
4726	(SAME AS 2042)			
4927	(SAME AS 2334)			

*Available at nominal cost from RW distributor. Upper clip 12-0140 Lower guide 12-0150

USE OF HYDRAULIC FLUID COMPARISON CHART

The heavier type domestic American hydraulic fluids will give increased damping over the fluid supplied with Red Wing Rear Oil Cushion Units and Red Wing front forks. The chart below shows how the various weights of two popular American fluids increase the damping of Red Wing suspension

components by specific percentages over the original damping characteristics. To increase the rebound damping characteristics of your Red Wing ROCU's and front fork select a different oil in stages. As an example, too much rebound in motocross riding will cause loss of control and traction.

Hydraulic fluid comparison chart

RED WING FACTORY SUPPLIED
FLUID BY WEIGHT**

LUBRITECH NUMBER
PERCENT INCREASE OF REBOUND DAMPING OVER FACTORY SUPPLIED FLUID

CASTROL NUMBER*

	5	7 1/2	10	20	30	40	50	10	20	30	40	50
RED WING ROCU (KMS/C/X)	14%	19%	27%	42%	55%	—	—	40%	52%	—	—	—
RED WING F.F.	—	—	—	—	—	—	—	—	—	—	—	—
HS-Z	—	—	12%	21%	54%	66%	104%	19%	33%	66%	90%	104%
HX-Z, HR-Z	—	—	15%	30%	60%	78%	85%	14%	32%	50%	86%	113%
MS-Z	—	—	11%	20%	35%	62%	70%	10%	21%	29%	68%	93%

*Lubritech and Castrol, two fluids tested by Red Wing, are among several suitable for use. Please avoid any fluid which might cause internal corrosion. Please also avoid the use of any fluid of a heavier viscosity than you absolutely need. Remember, the heavier the fluid, the more it will thin out as the temperature increases. Further, the heavier fluids will heat up faster than the lighter fluids. It is important to note that the damping forces of the ROCU

will remain much more constant over a large temperature range with the use of the lighter viscosity fluids. The object of any finely tuned suspension system is to reduce the variation of the system as it encounters changes due to weather and terrain.

**Fluid capacities for Red Wing suspension components are listed on their respective catalog pages.

HOW TO DETERMINE THE CORRECT LENGTH SPRING FOR YOUR SHOCK ABSORBER

CHART 2

- (1) Measure distance B with the shaft in a fully extended position and the preload adjuster cam in its minimum (lowest) position.
- (2) Refer to the specification sheet on the opposite page for correct spring selection, i.e., rates/ID/OD, etc. The Red Wing optional spring should be as long or longer than length "B" plus the preload requirement.*

Example:

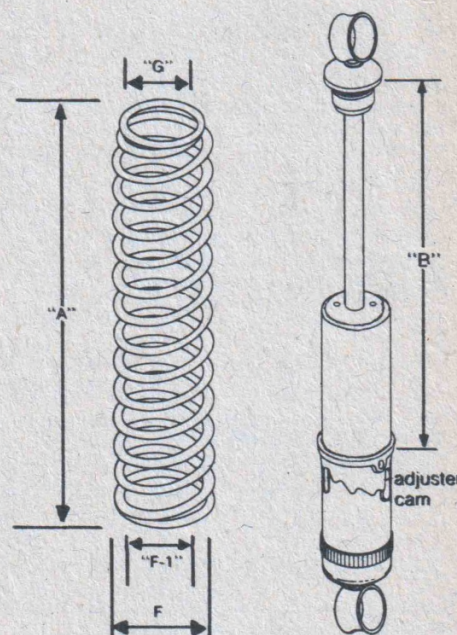
Length "B" (measured from customer's shock absorber) $7\frac{1}{2}"$
 Preload requirement CCS-C1 80/110 $\frac{1}{2}"$
 TOTAL $8\frac{1}{2}"$

Since spring Model No CCS-C1 free length is $8\frac{1}{4}"$ this will be satisfactory. The spring will be compressed $\frac{3}{4}"$ on the shock absorber and therefore the installed preload will be 80 lbs. x $\frac{3}{4}$ in. (.75) or 60 lbs.

- * "Pre-load Requirement" is the minimum compression allowable when the spring is mounted on the shock absorber.

IMPORTANT:

Spring dimensions and diameters, outside and inside, are important; therefore, you must be sure the specifications listed on the following chart are compatible with the shock absorber you have.



RED WING OPTIONAL SPRING SPECIFICATION

	RED WING NO.	RATE LBS.	"A" Free Length	F O.D.	"F-1" I.D.	"G" Upper End	"H" Wire diameter	Preload* Requirement	Each Position** Preload Adj.	Color (See Note 2)
Two Stage (Single Spring)	CCS/CRS-R1	60/90	8 1/4"	2 1/4"	1 3/4"	1 5/8"	6.5mm	1/2"	10 lbs.	Blue
	CCS/CRS-R2	60/90	9 3/4"	2 5/16"	1 3/4"	1 5/8"	6.8mm	1/2"	10 lbs.	Blue
	CCS/CRS-O1	70/100	8 1/4"	2 1/4"	1 3/4"	1 5/8"	6.5mm	1/2"	11 lbs.	White
	CCS/CRS-O2	70/100	9 3/4"	2 5/16"	1 3/4"	1 5/8"	7.0mm	1/2"	11 lbs.	White
	CCS/CRS-C1	80/110	8 1/4"	2 5/16"	1 3/4"	1 5/8"	6.8mm	1/2"	12 lbs.	Yellow
	CCS/CRS-C2	80/110	9 3/4"	2 3/8"	1 3/4"	1 5/8"	7.3mm	1/2"	12 lbs.	Yellow
	CCS/CRS-U1	90/110	8 1/4"	2 5/16"	1 3/4"	1 5/8"	7.0mm	1/2"	14 lbs.	Red
	CCS/CRS-U2	90/110	9 3/4"	2 3/8"	1 3/4"	1 5/8"	7.5mm	1/2"	14 lbs.	Red
Linear	CCS/CRS-X1	100	7 7/8"	2 5/16"	1 3/4"	1 5/8"	7.0mm	1/4"	16 lbs.	Green
	CCS/CRS-X2	100	9 3/8"	2 3/8"	1 3/4"	1 5/8"	7.3mm	1/4"	16 lbs.	Green
	CCS/CRS-Y1	120	7 7/8"	2 3/8"	1 3/4"	1 5/8"	7.5mm	1/4"	19 lbs.	Grey
	CCS/CRS-Y2	120	9 3/8"	2 3/8"	1 3/4"	1 5/8"	8.0mm	1/4"	19 lbs.	Grey
	CCS/CRS-Z1	145	7 7/8"	2 7/16"	1 3/4"	1 5/8"	8.0mm	1/4"	23 lbs.	Silver
	CCS/CRS-Z2	145	9 3/8"	2 1/2"	1 3/4"	1 5/8"	8.5mm	1/4"	23 lbs.	Silver
Two Stage (Double Spring See Note 1)	JOS-P0	70/130	7 1/4"	2 7/16"	1 7/8"	1 5/8"	6.5mm	3/8"	24 lbs.	(See Note 3) Black/Grey Dot
	JOS-P2	70/130	8"	2 1/2"	1 7/8"	1 5/8"	6.8mm	3/8"	24 lbs.	Black/Grey Dot
	JOS-P3	70/130	8 7/16"	2 1/2"	1 7/8"	1 5/8"	7.0mm	3/8"	24 lbs.	Black/Grey Dot
	JOS-P4	70/130	8 7/8"	2 1/2"	1 7/8"	1 5/8"	7.0mm	3/8"	24 lbs.	Black/Grey Dot
	JOS-P6	70/130	9 5/8"	2 1/2"	1 7/8"	1 5/8"	7.3mm	3/8"	24 lbs.	Black/Grey Dot
	JOS-R0	90/115	7 1/4"	2 7/16"	1 7/8"	1 5/8"	6.8mm	3/8"	22 lbs.	Black/Red Dot
Linear	JOS-R2	90/115	8"	2 1/2"	1 7/8"	1 5/8"	7.0mm	3/8"	22 lbs.	Black/Red Dot
	JOS-R3	90/115	8 7/16"	2 1/2"	1 7/8"	1 5/8"	7.3mm	3/8"	22 lbs.	Black/Red Dot
	JOS-R4	90/115	8 7/8"	2 1/2"	1 7/8"	1 5/8"	7.3mm	3/8"	22 lbs.	Black/Red Dot
	JOS-R6	90/115	9 5/8"	2 1/2"	1 7/8"	1 5/8"	7.5mm	3/8"	22 lbs.	Black/Red Dot
	JOS-S0	100	7 1/4"	2 7/16"	1 7/8"	1 5/8"	7 mm	3/8"	20 lbs.	Black/Green Dot
	JOS-S2	100	8"	2 1/2"	1 7/8"	1 5/8"	7.5mm	3/8"	20 lbs.	Black/Green Dot
Linear	JOS-S3	100	8 7/16"	2 1/2"	1 7/8"	1 5/8"	7.5mm	3/8"	20 lbs.	Black/Green Dot
	JOS-S4	100	8 7/8"	2 1/2"	1 7/8"	1 5/8"	7.5mm	3/8"	20 lbs.	Black/Green Dot
	JOS-S6	100	9 5/8"	2 1/2"	1 7/8"	1 5/8"	7.5mm	3/8"	20 lbs.	Black/Green Dot
	JOS-T0	120	7 1/4"	2 1/2"	1 7/8"	1 5/8"	7.5mm	3/8"	24 lbs.	Black/Yellow Dot
	JOS-T2	120	8"	2 1/2"	1 7/8"	1 5/8"	7.5mm	3/8"	24 lbs.	Black/Yellow Dot
	JOS-T3	120	8 7/16"	2 1/2"	1 7/8"	1 5/8"	8.0mm	3/8"	24 lbs.	Black/Yellow Dot
Linear	JOS-T4	120	8 7/8"	2 1/2"	1 7/8"	1 5/8"	8.0mm	3/8"	24 lbs.	Black/Yellow Dot
	JOS-T6	120	9 5/8"	2 1/2"	1 7/8"	1 5/8"	8.0mm	3/8"	24 lbs.	Black/Yellow Dot
	JOS-U0	145	7 1/4"	2 1/2"	1 7/8"	1 5/8"	8.0mm	3/8"	28 lbs.	Black/Blue Dot
	JOS-U2	145	8"	2 1/2"	1 7/8"	1 5/8"	8.0mm	3/8"	28 lbs.	Black/Blue Dot
	JOS-U3	145	8 7/16"	2 1/2"	1 7/8"	1 5/8"	8.0mm	3/8"	28 lbs.	Black/Blue Dot
	JOS-U4	145	8 7/8"	2 1/2"	1 7/8"	1 5/8"	8.5mm	3/8"	28 lbs.	Black/Blue Dot
	JOS-U6	145	9 5/8"	2 1/2"	1 7/8"	1 5/8"	8.5mm	3/8"	28 lbs.	Black/Blue Dot

* "Preload requirement" (as opposed to preload adjustment) is the minimum compression of the spring allowable when mounted on the shock absorber.

**Preload adjuster is the amount of preload capacity that may be applied to each shock absorber using the cam. See "preload increments" in the glossary.

Note 1 Includes the width of the KMX spring separator part no. 13-1160. For use with other brand shocks, Red Wing two spring systems require this separator. It is available

from your Red Wing distributor.

Important: The inside Diameter of the separator is 1.67 inches (42.5mm).

Note 2 All Red Wing springs for KMS/C shock absorbers (models R, O, C, U, X, Y, Z) are available in chrome (chrome models are designated CRS).

Note 3 All Red Wing springs for KM-X shock absorbers (P,R,S,T,U) are painted black with identifying color dots as shown.

ROCU **RED WING**

Heavy Duty Rear Oil Cushion Units

SPECIFICATIONS

	KM-S300/ C300	KM-S310/ C310	KM-S320/ C320	KM-S330/ C330	KM-S340/ C340
LENGTH	11-3/4"	12-1/4"	12-5/8"	13"	13-3/8"
See Cross Reference Chart for Application to Specific Motorcycles and Model Years.					
NECESSARY EYE BUSHINGS	10 mm & 12 mm (for 3/8" and 7/16" bolts) included				
EYE WIDTH	3/4"	3/4"	3/4"	3/4"	3/4"
Spacers included for use with 7/8" mounting.					
STROKE:					
KM-S Models	3"	3-3/8"	3-3/8"	3-3/4"	4"
KM-C Models	3"	3-1/8"	3-3/8"	3-1/2"	3-3/4"
SPRING LENGTH	7-7/8"	7-7/8"	7-7/8"	9-3/8"	9-3/8"
SPRING OUTSIDE DIAMETER	2-1/4"	2-1/4"	2-1/4"	2-1/4"	2-1/4"
STANDARD SPRING RATE	60/90 lb.	60/90 lb.	60/90 lb.	60/90 lb.	60/90 lb.
See Optional Spring Catalog Page for Additional Rates					
SPRING PRELOAD ADJUSTMENT (STATIC WEIGHT LOAD PER SPRING):	Spring preload adjustments are in 10 lb. increments ranging from 30 lbs. in the first position up to 70 lbs. in the fifth position. The standard spring preload for Red Wing shock absorbers is 50 lbs. (Position three). See illustration on this page.				
OIL CAPACITY:					
KM-S Models	85cc ± 1/2cc (2.9 oz.)	83.5cc ± 1/2cc (2.8 oz.)	90.5cc ± 1/2cc (3.1 oz.)	89cc ± 1/2cc (3 oz.)	92cc ± 1/2cc (3.2 oz.)
KM-C Models	77cc ± 1/2cc (2.6 oz.)	80cc ± 1/2cc (2.7 oz.)	83cc ± 1/2cc (2.8 oz.)	85.5cc ± 1/2cc (2.9 oz.)	88.5cc ± 1/2cc (3 oz.)
SHIPPING WEIGHT PER PAIR	8 lbs.	8-1/2 lbs.	8-1/2 lbs.	9 lbs.	9 lbs.
SHAFT DIAMETER	12.5mm (1/2")	12.5mm (1/2")	12.5mm (1/2")	12.5mm (1/2")	12.5mm (1/2")

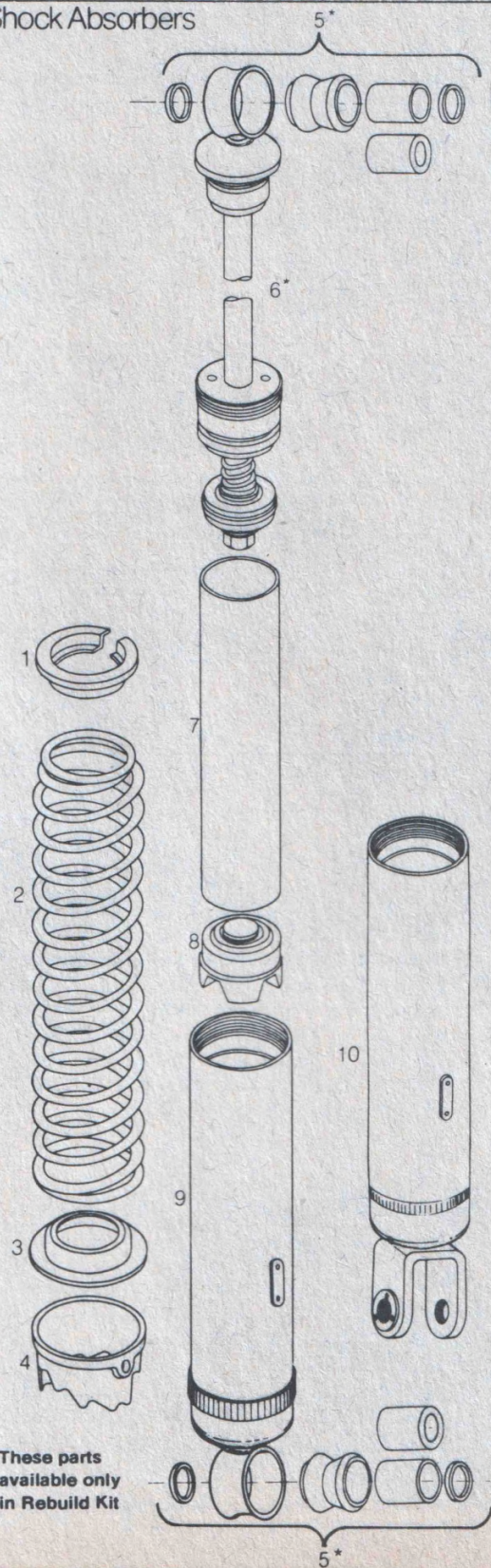
Reference No.	1	2	3	4	5/6	7	8	9
Model	Quick-Clip	Chrome Spring 60/90	Locating Ring	Preload Adjuster	Rebuild Kit	Cylinder	Base Valve	Outer Shell
KM-S300		10-0210			RK-1	10-0110		10-0120
KM-S310		10-0210			RK-2	10-0110		10-0120
KM-S320		10-0210			RK-2	10-1110		10-1120
KM-S330		10-1210			RK-3	10-1110		10-1120
KM-S340		10-1210			RK-4	10-0110		10-2120
							12-0130	10
KM-C300	12-0140	10-0210	12-0150	12-0160	RK-1	10-3110		10-3120
KM-C310		10-0210			RK-5	10-4110		10-4120
KM-C320		10-0210			RK-2	10-0110		10-5120
KM-C330		10-1210			RK-6	10-5110		10-6120
KM-C340		10-1210			RK-3	10-1110		10-7120

REBUILD KITS 5/6

MODEL	FITS
RK-1	KM-S300 KM-C300
RK-2	KM-S310 KM-S320 KM-C320
RK-3	KM-S330 KM-C340
RK-4	KM-S340
RK-5	KM-C310
RK-6	KM-C330

- All Necessary Parts to Rebuild 1 Shock Absorber. Includes Complete Shaft Assembly with Seals and Rings.
- All Eye Bushings and Spacers.
- Rubber Eye Grommets.
- A Kit for Every Red Wing KM-S or KM-C Shock Absorber.

Shock Absorbers



KM-X ROCU

RED WING

Heavy Duty Rear Oil Cushion Units

Shock Absorbers/KM-X System (eye-to-eye)

SPECIFICATIONS:

	KM-X 300	KM-X 320	KM-X 330	KM-X 340	KM-X 360
LENGTH:	11-3/4"	12-5/8"	13"	13-3/8"	14-1/4"
See length/fit application chart and Ride Guide for correct spring selection.					
NECESSARY EYE BUSHINGS:	10 mm & 12 mm (for 3/8" and 7/16" bolts) included				
EYE WIDTH:	3/4"	3/4"	3/4"	3/4"	3/4"
Spacers included for use with 7/8" mounting					
STROKE:	3.15"	3.54"	3.74"	4.0"	4.13"
SPRING LENGTH:	4.21"	5.00"	5.39"	5.79"	6.58"
SPRING OUTSIDE DIAMETER:	2.38"	2.41"	2.42"	2.42"	2.44"
OPTIONAL SPRING RATES FOR ALL MODELS	P(70/130 lbs) • R(90/115 lbs) • S(100 lbs) T(120 lbs) • U(145 lbs)				
SPRING PRELOAD ADJUSTMENT (STATIC WEIGHT LOAD PER SPRING):	See Red Wing Ride Guide for preload increments.				
OIL CAPACITY:	136 cc 4.08 oz.	142 cc 4.26 oz.	145 cc 4.35 oz.	148 cc 4.44 oz.	157 cc 4.71 oz.
SHIPPING WEIGHT PER PAIR:	8-1/2 lbs	8-3/4 lbs	9-1/2 lbs	9-1/2 lbs	10-1/2 lbs
SHAFT DIAMETER:	12.5 mm (1/2")	12.5 mm (1/2")	12.5 mm (1/2")	12.5 mm (1/2")	12.5 mm (1/2")

Reference No.	1	2/2A	3	4	5 6	7	8	9	10
Model	Quick Clip	Chrome Spring 70/30	Spring Separator	Pre-load Adjuster	Rebuild and Conversion Kits	Cylinder	Base Valve	Outer Shell	Anti-Aeration Spring
KM-X300		10-1320				10-3110	12252	13-0140	
KM-X320	12-0140	10-1330				10-0110	20501	13-0160	
KM-X330	10-1340					10-5110	13-1130	13-0170	
KM-X340	10-1350					10-1110	13-1130	13-0180	
KM-X360	10-1360					10-6110	13-1130	13-0190	

Reference No. 2/2A Optional Springs—model numbers

ROCU Model	P(70/130 lbs)	R(90/115 lbs)	S(100 lbs)	T(120 lbs)	U(145 lbs)
KM-X300	JOS-P0	JOS-R0	JOS-S0	JOS-T0	JOS-U0
KM-X320	JOS-P2	JOS-R2	JOS-S2	JOS-T2	JOS-U2
KM-X330	JOS-P3	JOS-R3	JOS-S3	JOS-T3	JOS-U3
KM-X340	JOS-P4	JOS-R4	JOS-S4	JOS-T4	JOS-U4
KM-X360	JOS-P6	JOS-R6	JOS-S6	JOS-T6	JOS-U6

CONVERSION AND REBUILD KITS* (5/6)

ROCU MODEL	STANDARD MOUNT ENDURO/MOTO-X KIT (USES JOS-P/R/S/ T/U SPRINGS)	FORWARD MOUNT** MOTO-X (USES JOS-S/T/U SPRINGS)	CAFE/ROAD RACE TOURING (USES JOS-S/T/U SPRINGS)
KM-X 300	KX-0	FMX-0	CRX-0
KM-X 320	KX-2	FMX-2	CRX-2
KM-X 330	KX-3	FMX-3	CRX-3
KM-X 340	KX-4	FMX-4	CXR-4
KM-X 360	KX-6	FMX-6	CRX-6

**Note: Warranty remains in effect only if recommended springs (see Red Wing Ride Guide available at dealer), and prescribed conversion kit (see above) are used. Red Wing lever ratio must be between 1.5 and 1.7 when mounted (see FM-X conversion kit package for instructions).

