FRONT FORK

Operational Maintenance

To achieve optimum performance from your White Power 4054 front forks, follow these maintenance procedures.

After every two races or eight hours of riding, loosen the breather plugs (located on top of the upper fork cap) a few turns to release air pressure build-up. Also, pull the fork wipers down and clean around the seal area after a build-up of dirt occurs. After every four races or thirty-five (35) hours of riding, or when damping becomes erratic, change the fork oil.

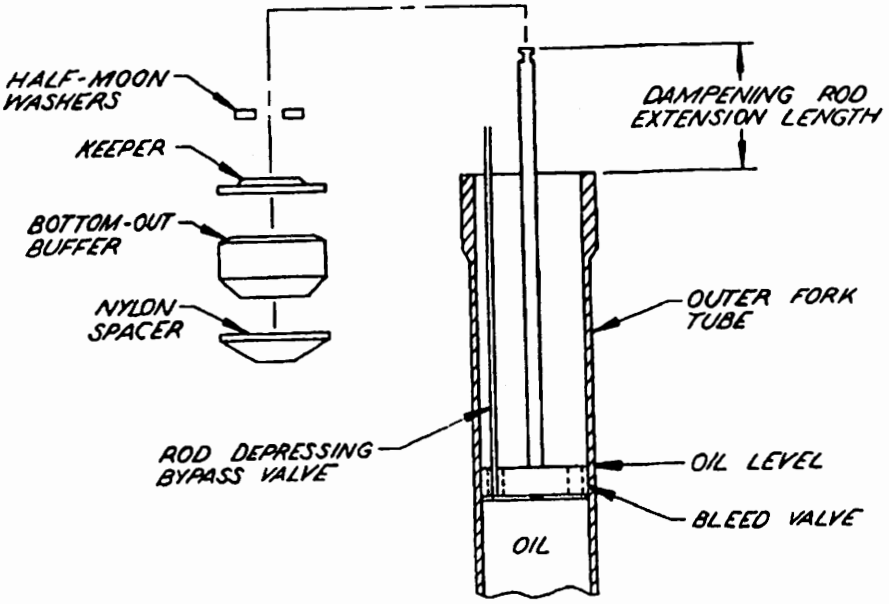
Oil Replacement

To replace the fork oil, loosen the breather plugs to release any air pressure built up in the fork. Loosen both the upper fork cap and lower fork cap approximately one turn. Remove the front wheel, brake caliper and the brake line guides. Do not remove the brake line from the caliper. Remove the fork tube from the triple clamps and turn the fork upside down. The bottom fork cap should be facing up. Unscrew the bottom fork cap and remove the preload spacer and fork spring. Drain the fork oil and pump the fork a few times to drain the remaining oil. Replace the fork spring and preload spacer, and screw on the fork cap. Turn the fork over and unscrew the top cap and compress fork slightly to remove the half-moon washers. Pull out the keeper by pressing on one side and compressing the fork. Remove the bottom-out buffer and nylon spacer. Turn the fork over and drain the remaining oil.

Next, compress the fork so you can see the bypass valve. Take a thin rod (1/8" or less O.D.) and lightly depress in one of the six holes in the valve as shown in *Figure 1* (Page 4). This will allow the oil to drain down to the lower fork leg when poured. The standard oil level measurement location in the White Power 4054 fork is where the oil comes up flush with the distance between the top of the dampening rod to the top of the outer fork top, as shown in *Figure 1*.

From our racing experience, we recommend the oil level be flush with the top of the bleed valve when the dampening rod is extended 4-1/2" (130mm) from the fork tube. We recommend Bel-Ray HVI 10W shock and fork oil.

Figure 1



The quantity of oil in the fork – 20 to 23 ounces of 10 weight oil only affects the last fifty per cent of the travel. The more oil in the fork, the less the fork will have a tendency to bottom out. Never exceed an oil level height of 5-11/16" (150mm) and never go below 3-15/16" (120mm).

EXAMPLE:

	Dampening Rod Length From Oil Level		Fork Action
	3-15/16"	(120 mm)	Soft
(STANDARD)	5-1/8"	(140mm)	Medium
	5-11/16"	(150 mm)	Hard

The standard free length of the rear spring is approximately 8-11/16" (220 cm). This length can vary slightly from spring to spring. The preload should be approximately 1/4" (6 mm). (If the preload falls out of the 1/8" - 1/2" dimensional boundary while obtaining the 2" - 3" of suspension sag, a heavier or lighter spring rate is necessary.)

EXAMPLE:

Sag	Preload	Comments
2" (50 mm)	7/16" (11 mm)	Good
3" (76 mm)	1/4" (6 mm)	Good
3" (76 mm)	5/8" (16 mm)	Heavier spring rate needed
2" (50 mm)	1/8" (3 mm)	Lighter spring rate needed

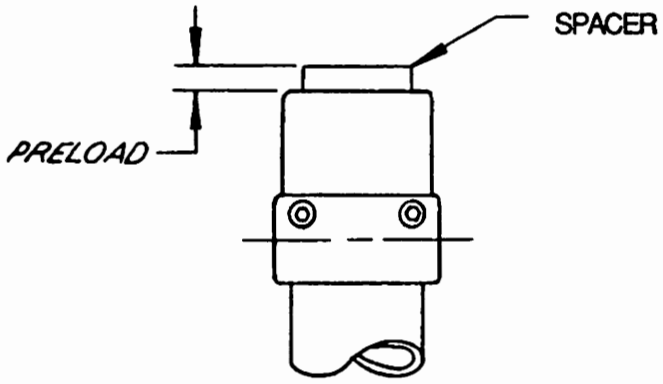
Spring Rates available:

Kg/mm	8.7	9.2	9.7
Lb./in.	485	515	540

Preload Adjustment

To change the initial stage of travel in the fork, decrease or extend the length of the preload spacer. By decreasing the length of the preload, the initial travel will be softer. See *Figure 2* for preload measurement.

Figure 2



EXAMPLE:	PRELOAD LENGTH	FORK ACTION
	0" (0 mm)	Soft
	3/16" (5 mm)	Medium
	3/8" (10 mm)	Hard

Spring Rate

If the fork action is too stiff through the entire range of travel while using the shortest dampening rod length and the shortest preload length, we recommend changing the standard 25 lb. fork spring rate to a 23 lb. fork spring rate. The spring rate can be changed by adding a small primary spring to the main spring. See *Figure Three* for installation.

Figure 3